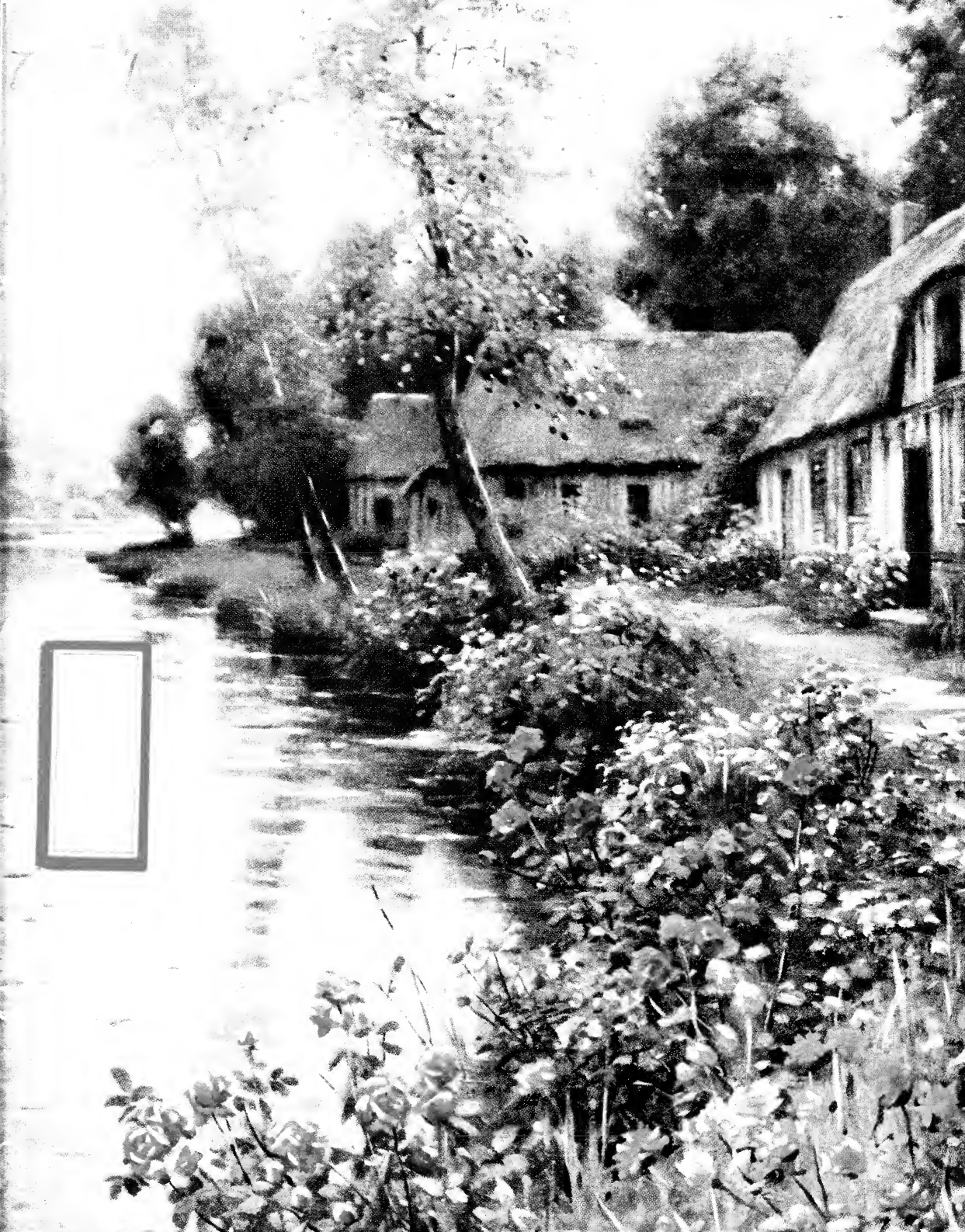


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THE J. M. McCULLOUGH'S SONS COMPANY
1838-1931

SPRING CATALOG

316 WALNUT STREET

CINCINNATI, OHIO





INSTRUCTIONS TO PURCHASERS



P O S T A G E When ordering **Beans, Corn or Peas** to be forwarded by mail, be sure to add 7c per pound for POSTAGE in first and second zones. For third zone add 8c per pound, for all other zones add extra postage in proportion. See Parcel Post Rates.

Packets and half pounds of Beans, Corn and Peas are sent postpaid at prices quoted, and all other varieties of Vegetable and all Flower Seeds will be forwarded free by mail at Catalog Prices unless otherwise noted. Grass Seeds, Clover Seeds, Miscellaneous Seeds, Plants, Tools and Supplies are **not** sent free by mail—see Parcel Post Rates.

Order Early. It will greatly facilitate shipments if orders are sent early. We aim to send off all orders the day received.

Send the Money with the Order. Postal Note, Postoffice Order, Registered Letter, Express Money Order, or Draft on Cincinnati or New York. United States Postage Stamps will be received for small amounts; be exceedingly careful about the least moisture getting on them when remitting, as they sometimes reach us so stuck together as to be almost worthless.

We do not send C. O. D. Everything being plainly priced, the return charges on money is an unnecessary expense.

Should you change your address, we will esteem it a favor if you will notify us, so we can forward our Catalog with regularity; if you receive two Catalogs of the same kind please hand one to some friend who has a garden.

Should an error occur, we desire to be promptly informed, and will take pleasure in making satisfactory corrections.

Write your Name and Address distinctly and in full; please use the Order Sheet and Envelope inserted in this Catalog.

PARCEL POST RATES

All parcels of seeds, bulbs and plants, up to and including 8 oz. at the rate of 1c for each 2 oz. regardless of distance; over 8 oz., at the Zone Rate. All merchandise other than seeds, bulbs and plants up to and including 4 oz. in weight can be sent at the rate of 1c an ounce regardless of distance. Over 4 oz. at the Zone Rate

NOTE:—When estimating postage on goods not included in our free delivery, bear in mind that while the packing on one pound may only weigh the fraction of a pound, it must be considered as a full pound when adding postage. On larger quantities add postage in proportion.

Limit of weight for delivery within local, first, second and third zones is 70 pounds; to all other zones, 50 pounds.

When larger quantities are wanted we can pack in two or more parcels if necessary, provided money is remitted to cover postage.

Zone	First Pound	Each Additional Pound
1 and 2—150 miles.....	7c	1c
3—150 to 300 miles.....	8c	2c
4—300 to 600 miles.....	8c	4c
5—600 to 1,000 miles.....	9c	6c
6—1,000 to 1,400 miles.....	10c	8c
7—1,400 to 1,800 miles.....	12c	10c
8—All over 1,800 miles.....	13c	12c

It is advisable to have all merchandise insured. Present rates of Parcel Post insurance are as follows:

Not exceeding \$ 5.00 value.....	5c
Not exceeding 25.00 value.....	8c
Not exceeding 50.00 value.....	10c
Not exceeding 100.00 value.....	25c

If insurance is desired, add to remittance as indicated above.

Poisons cannot be sent by mail. Liquids and goods packed in glass should be sent by Express.

About Warranting Seeds—We have often been asked if we “**guarantee or warrant our Seeds.**” We beg to state plainly **we do not**, for the reason that practical experience has assured us of the fact that crops may fail, no matter how fresh or pure the seed sown may be. We trust that our customers will fully realize that it is to **our interest to send none but the very best quality of seeds.** It would be folly to do otherwise, unless we wanted to sacrifice our good reputation for selling **Reliable Seeds**, which we are constantly striving to extend.

To secure success, however, it is necessary that the customer should do his part well, or our good seeds will be ruined. With the best of management and with good seeds there will be an occasional unaccountable failure. The best of gardeners sometimes fail, and try again with the same seed with good results.

The J. M. McCullough's Sons Co., gives no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants it sells, and it will not be in any way responsible for the crop.

We shall always be pleased to reward customers who send us the names and post-office addresses of their friends who buy Seeds, Bulbs, Plants, Poultry Supplies, etc.

FLOWER SEED NOVELTIES



Calendula Sensation

CALENDULA

Sensation. A distinct new type of vigorous growth. Flowers borne on stout stems. The blooms are flat, and are larger than those of any type previously introduced. The color of the petals is brilliant orange with a scarlet sheen, with full yellow center. The best orange forcing Calendula for florists' use. $\frac{1}{4}$ oz., \$1.00; 15c pkt.

Radio. This Novelty is quite distinct from any other Calendula. The petals of the large, perfectly double flowers, instead of being flat like the varieties now on the market, are beautifully quilled forming an almost globular flower. In color a rich, glittering orange. $\frac{1}{4}$ oz., \$1.00; 15c pkt.

COREOPSIS

Lanceolata Grandiflora Fl. Pl. (Double-flowering Coreopsis). This new double and semi-double form is just as easy to grow as the single flowering and the extra petalage adds a further charm to the flower.

$\frac{1}{4}$ oz., 50c; 15c pkt.

DAHLIA, COLTNESS HYBRIDS

These bedding Dahlias grow from one to one and a half feet in height, plants of a bushy habit. Will produce flowers freely from seed the first year. Continues in flower from early July until destroyed by frost. 15c pkt.

DELPHINIUM, HOLLYHOCK STRAIN

These are the greatest advance in Delphiniums. Their graceful spire shaped spikes of enormous size and beauty of form are rapidly bringing them to the front as the most popular flower for cutting or the garden. This mixture contains all the colors in Delphiniums, including both double and single flowers. 20c pkt.

GAILLARDIA GRANDIFLORA, PORTOLA HYBRIDS

A superb new strain of Gaillardia. Flowers are large size, color ranging through shades of bronzy red with the characteristic golden tipped petalage and the robust vigor of the well known Portola variety. A splendid cut flower. 15c pkt.

HELICHRYSUM MONSTROSUM, SILVERY PINK

A delicate shade of silvery pink. The delicate color is new and heretofore unknown in Helichrysums. Blooms are large, slightly over two inches in diameter, a good commercial variety. 15c pkt.

LARKSPUR

Exquisite Pink. An improved strain of Double Stock Flowered Larkspur, true exquisite pink color with wonderful new form, upright habit similar to the perennial Delphinium, comes practically true from seed. 15c pkt.

Exquisite Rose. A beautiful shade of Rose Pink color that makes a charming and effective bunch when cut and equally effective in the garden. 15c pkt.

LINARIA

Macedonica Speciosa. (Perennial). Easily grown from seed, and is undoubtedly the best yellow perennial that can be grown for general use. It is hardy and can be used where medium height is needed in rock garden work. The flowers resemble large golden yellow snapdragons, borne on stems averaging three feet. 15c pkt.

Linaria Maroccana Hybrida. A hardy annual with small dainty flowers resembling miniature Antirrhinums and in addition each flower has a long, Columbine-like spur. It makes a nice cut flower and the colors range through crimson and gold, pink, mauve, dark blue, chamolais and rose, with many lighter art shades. Height from twelve to eighteen inches, and it blooms in about eight weeks from seed. 10c pkt.

SCABIOSA CAUCASICA, GIANT HYBRIDS

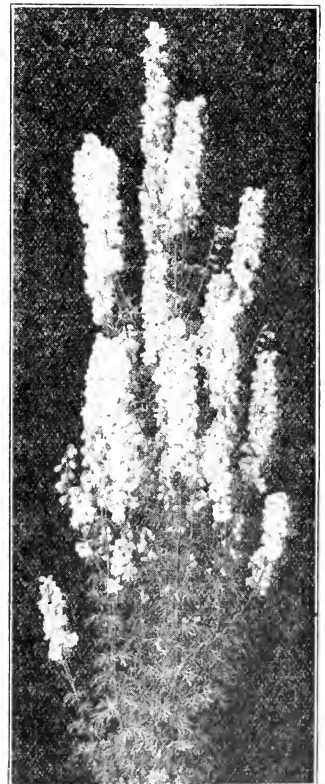
A great improvement over the Caucasica, being more vigorous, with larger and longer stems and larger and heavier petals, which are ruffled and slightly frilled on the edges. In this hybrid strain you will find colors ranging from white to the darkest blue, but the predominating colors are of delicate lilac and mauve. 15c pkt.

VERBENA, HYBRIDA GRANDIFLORA ROYALE

Flowers are enormous size, the individual flowers measuring over an inch and a quarter in diameter, color dark royal blue, large creamy yellow eye. 15c pkt.

ZINNIA, LILLIPUT SALMON ROSE

The Lilliput type has become very popular within the last two years for general garden use and for bedding and border work, and has become very popular as a florist's cut flower. $\frac{1}{4}$ oz., \$1.25; 15c pkt.



Larkspur
Improved, Exquisite Pink



A Spray of Beauty-Bush

BEAUTY-BUSH (*Kolkwitzia Amabilis*)

New Flowering Shrub From China.

Following is a description of this new shrub, taken from a bulletin of the Arnold Arboretum Harvard University, in which they say:

Kolkwitzia Amabilis is now in blossom on Bussey Hill, where a young and vigorous plant is flowering for the first time. Every succeeding year emphasizes the garden value of this plant for which the descriptive title of Beauty-Bush has been aptly coined.

It is a twiggy shrub, growing from 6 to 8 feet tall, with the inner stems erect or ascending and the outer ones arching to the ground, the whole plant forming a dome-shaped mass. The flowers are produced along the whole length of the branches in clusters at the ends of short, leafy shoots. They are tubular with a gaping mouth, deep pink without, stained with yellow brown on the lower throat and lip. The pedicels and ovary are clad with spreading, white, bristle-like hairs which add to the attractiveness of the inflorescence.

The graceful habit of the plant, its free-flowering qualities and pleasing color, combined with perfect hardiness, make this one of the most beautiful, as well as most useful shrubs that China has given to the gardens of this country. It was introduced into cultivation by Wilson, and has been growing in the arboretum since 1907.

Related to the Weigelas or Diervillas, it is far more beautiful than any of them, and is destined to become one of the most familiar plants in our gardens.

These Plants are Rare and Beautiful—Order Early

• Price: \$1.00 each, Postpaid.

FLOWERING CRABS (*Malus*)

The Chinese Flowering Crabs are not as well known as the Flowering Cherries, but a lot of them are decidedly the most gorgeous and brilliant subjects for our gardens. The flowers are produced before the foliage, coming in multitudes and almost obliterating the branches. The effect is of a tree clothed in transparent silk gauze, shimmering and changing in color value with the elevation of the sun. The effect is beautiful in single trees or clumps, but is wonderful in hedges. They grow in any soil, and these wonderful trees are deserving of a spot on every home grounds.

Elbyii. This is a purple-leaved, vigorous-growing Crab Apple of recent introduction from England. The flowers are single, of a deep pink or red color. This is a distinctly valuable Flowering Crab and has purplish red foliage, as well as the attractive red flowers. 2 to 3 feet, \$2.50 each.

Aldenhamsensis. The Aldenhamsensis is a new Flowering Crab, originating as a chance hybrid on the place of Hon. Vicary Gibbs at Aldenham, England. This is considered the finest of all the red-flowered Crab

Apples flowering after most of the other Crabs have finished. Double red. 2 to 3 feet, \$2.50 each.

Atrosanguinea. Beautiful rose-pink flowers during the blooming season. Tree grows into a spreading form that is very attractive. 3 to 4 feet, \$1.50.

Floribunda. Bright pink flowers upon opening turning to pure white. Small yellow fruit in the autumn. 2 to 3 feet, \$1.50.

Parkmani. A broad spreading form with very bright rose-colored flowers of a semi-double form. 2 to 3 feet, \$1.00.

Bechtels. Pale pink double flowering; sweet scented flowers; plant of an upright habit. Can be used as specimen plants. Very attractive in groups. 3 to 4 feet, \$1.50.

COTONEASTER HORIZONTALIS

Rock Cotoneaster. A low, spreading, horizontal, evergreen shrub, growing to a height of 18 inches, and spreading to about 3 feet, glossy evergreen leaves, with numerous pink flowers that cover the shrub. The leaves turn a brilliant scarlet in autumn, which with the red berries it produces annually, makes it one of the finest shrubs grown. Price: 8 to 10-inch plants, \$1.50 each; 2 for \$2.50.

JAPANESE FLOWERING CHERRY

Also called the Rose Flowering Cherry. The most notable trees of this group in the United States are at Washington, D. C. This collection of trees was presented to our nation by the City of Tokio, Japan. They were planted along the Potomac River Drive, and now since they have come into bloom, are visited by everybody in Washington during the blooming season. The fame of these Cherries has spread all over the United States, and as they are hardy everywhere they should be largely planted.

White Flowering Cherry (*Cerasus Avium Alba*). Beautiful small trees absolutely covered with flowers in the springtime. They are of very easy culture and will do well in any location where the soil is fertile and well drained. Flowers of this variety are pure white and are found in clusters on every twig. Price: 3 to 4 feet, \$2.50 each.

Pink Flowering Cherry (*Cerasus Avium Rosea*). These trees are covered with flowers of a deep rose color, in clusters all over the trees. Has the same habit otherwise as the White Flowering. Price: 3 to 4 ft. trees, \$2.50 each.



White Japanese Flowering Cherry

McCULLOUGH'S "SUBURBAN" LAWN SEED

(Trade Mark Registered)
ASSURES A SUCCESSFUL LAWN



WILL MAKE A BETTER LAWN THAN TURF OR SOD

McCullough's "Suburban" Lawn Seed

WE feel that the day of secret formula lawn mixtures is past and that our customers are entitled to know what they are buying. Because of great variation in soils a mixture of grasses is preferred by the average home owner and Suburban Lawn Seed, based on a time tried formula, assures a successful and permanent lawn under all ordinary conditions.

Suburban Lawn Seed is composed of the highest quality Kentucky Bluegrass, Redtop, White Clover, the imported fine fescues and Ryegrass. Kentucky Blue Grass is the dominant turf grass on alkaline soils such as exist in the Central States. Redtop persists for several years under lawn conditions and is used because of its ability to form turf quickly. The imported fescues are adapted to sandy and also shady places and are used for this purpose. Most people want White Clover in their lawns and we use 3 to 4% in Suburban Lawn Seed. Those desiring a greater amount can easily add a little when sowing. Ryegrass is a nurse crop only and will disappear in about a year's time. It serves the purpose of protecting the slower permanent grasses and makes a surprisingly quick growth of vivid green a few days after sowing.

How to Make a Lawn.—A well-kept lawn instantly commands the attention of all lovers of the beautiful in Nature and is an unfailing mark of intelligence and taste. The best soil is a good garden loam of medium texture: the surface should be thoroughly pulverized and smoothed to the desired grade: remove all large stones, roots and hardened pieces of earth that cannot be readily broken, ample time being allowed for the thorough settling of the soil, which is greatly aided by a few heavy showers of rain. The surface soil should be from 2 to 5 inches in thickness on a subsoil somewhat porous but of character to retain and return to the top soil by capillarity enough moisture to supply the grass roots during periods between rains. The impervious clay subsoils so common in Ohio should be improved by admixture of some porous material as granulated peat moss and prepared humus.

The high-grade lawn grasses will maintain their own in competition with weeds if supplied with sufficient plant food. Vigoro is an ideal Plant Food to use with Suburban Lawn Seed.

When the soil is firm level and suitably moist, sow Suburban Lawn Seed at the rate of 6 to 8 pounds to each 1000 square feet. This rate of seeding has been advised by the U. S. Golf Association Green Section. It is unwise to be too economical in the quantity of seed used if the best results are desired. The seed should be sown broadcast and as evenly as possible, then give a thorough rolling or tamp well with the back of a spade. The seed must be well firmed in the soil.

Crabgrass, the worst lawn pest, is an annual starting in late spring and often "taking" the lawn in a showery summer as it spreads rapidly by root stocks and runners. It should be weeded out by hand in early stages as it is almost impossible to control after becoming established. Crabgrass re-seeds itself and though it dies out at the first freeze the seeds are in the ground to germinate the following year.

A new lawn should be seeded in the early fall if possible and six weeks growth before winter, with proper fertilization, assures a comparatively weedless lawn. As fall seeding, particularly on old lawns, is often impracticable, Suburban Lawn Seed should then be sown early in the spring and if well fed with Vigoro the grass will thrive and compete strongly with weeds. Persistent weeds such as Crabgrass and Chickweed should be weeded by hand. Always keep a little Suburban Lawn Seed to sow where weeds have been pulled.

Superficial sprinkling is worse than none. Give the lawn a thorough soaking every week or ten days during dry periods so that the water penetrates and is absorbed by the subsoil. Let your slogan be: "Crowd out the weeds with Suburban Lawn Grass."

General Surface Renovating.—When your lawn has been established, you will find it to your advantage to lightly re-seed each season. As early as possible, carefully rake off all dead leaves, etc., and give the lawn a dressing of VIGORO at the rate of at least 40 pounds to 1000 square feet, and rake in, after which sow our Suburban Lawn Seed at the rate of 3 to 4 pounds to 1000 square feet: roll thoroughly or tamp with the back of a spade.

Renovating in Spots or Patches.—In the best-kept lawns unsightly spots devoid of grass will appear, which are caused by impoverished soil, root-destroying insects or fungous disease: and as these spots are not protected by a covering of turf during the winter, the chemical elements in the soil are leached out by the action of the weather, causing them to "cake" or become hard early in the spring. It is useless and a waste of seed to sow these spots unless they are carefully prepared to receive the seed. For this purpose it is our practice to cover them with Vigoro at the rate of four pounds to 100 square feet, then dig these spots up, and after raking until no trace of the fertilizer can be seen, sow our Suburban Lawn Seed at the rate of 2 pounds to each 250 square feet: roll thoroughly or tamp with the back of a spade.

Prices:— $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 5 lbs., \$2.35; 10 lbs., \$4.40; 20 lbs., \$8.40.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

VIGORO is the Best Plant Food for Lawns and should be evenly applied at the rate of 50 lbs. to 2000 sq. ft. (See Fertilizers)

McCULLOUGH'S

"SHADY-PLACE"

LAWN SEED



McCULLOUGH'S Shady Place Lawn Seed is composed of the same grasses as Suburban in different proportion, containing a much greater amount of Chewings Fescue and also in addition Poa Trivialis or Rough Stalked Meadow Grass. This is imported from Europe and is high in price. It is ideal for Shady Places. Chewings Fescue and Poa Trivialis may be used alone but will take much longer to become established than McCullough's Shady Place Mixture.

When shade is very dense, particularly under old Maple trees, the tree is probably using all the available food, moisture and air and it is useless to expect permanent turf in such places. McCullough's Shady Place Mixture will form turf unless conditions are very unfavorable. Should the ground be covered with moss, first remove the moss with a sharp rake and apply Vigoro at the rate of not less than 50 pounds to 2000 square feet, then sow our Shady Place Mixture at the rate of 8 pounds to 1000 square feet.

Prices:— $\frac{1}{2}$ lb., 35c; 1 lb., 55c; 5 lbs., \$2.60; 10 lbs., \$4.90; 20 lbs., \$9.40.

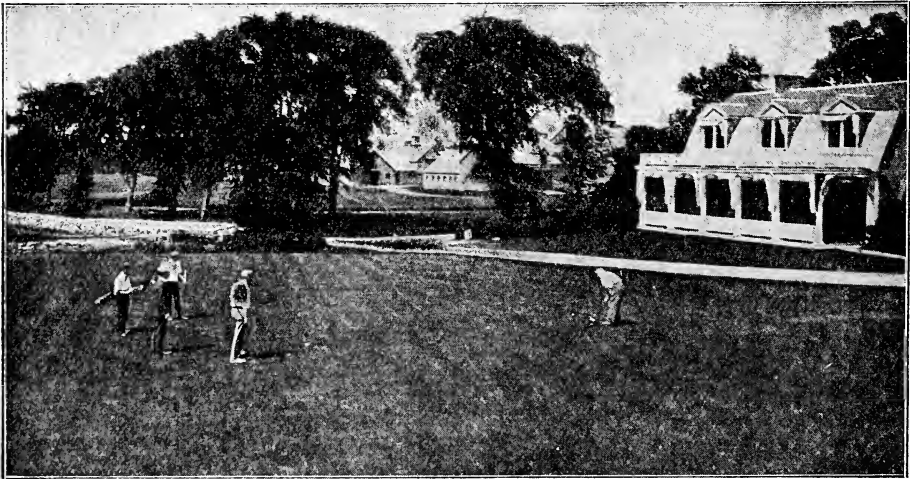
Postage Must Be Added if Wanted by Mail. See Postal Rates. Second Page of Cover.

McCULLOUGH'S CENTRAL PARK LAWN SEED

TO supply the demand for a moderate priced Lawn Seed that will meet general requirements, it has become necessary to place on the market our "Central Park." The quality of this lawn seed will compare favorably with a majority of the lawn mixtures on the market. It contains slightly less of the permanent and a little more of the quick growing non-permanent sorts.

Prices:—1 lb., 40c; 5 lbs., \$1.85; 10 lbs., \$3.50; 20 lbs., \$6.50; 50 lbs., \$16.00; 100 lbs., \$30.00.

SPECIAL GRASS SEED FOR PUTTING GREENS AND FAIRWAYS



McCullough's Par 4 Lawn Seed

IS designed for those who desire a mixture without White Clover and Ryegrass. It is composed of the highest quality Bent, Chewings Fescue, Kentucky Bluegrass and Fancy Redtop and takes longer to establish turf than Suburban Lawn Seed. Bent of the Prince Edward Island or Colonial type is becoming very popular in mixtures, as it forms a luxuriant thick turf.

1 lb., 80c; 5 lbs., \$3.75; 10 lbs., \$7.25; 20 lbs., \$14.00.

Putting Greens

AS Bent is now recommended for Putting Greens we have discontinued our Putting Green Mixture.

Fairways

FOR Fairways we recommend a mixture of Kentucky Bluegrass and Fancy Redtop, White Clover, Chewings Fescue and Ryegrass optional. Prince Edwards Island Bent is now often included in fairway mixtures with splendid results. We will be glad to make up mixtures to order for any purpose and guarantee high quality and accurate mixing.

Turf Fertilizers

Vigoro or Special Bent Fertilizers are the best fertilizers for lawns. Ammonium Sulphate may be used on Putting Greens when the other elements needed are added in the compost used for topdressing. Vigoro and Special Bent Fertilizers are complete in themselves (See Fertilizers).

THE BENT GRASSES

THE great popularity of golf has brought the Fine Bent Grasses into prominence through their almost universal use on Putting Greens in the northern half of the country.

We are sole wholesale distributors in the United States of Prince Edward Island Bent and the seed of the other fine bent grasses now raised on Prince Edward Island and vicinity, and are one of the largest handlers of sealed and certified bent seed in the world. We can only discuss the various sorts briefly here but will be glad to send our booklet: "The Fine Bent Grasses" on request.

The bent grasses are native to acid soils but will thrive over a wide range of soils though naturally favoring those toward the acid side. In Ohio, where soils are chiefly alkaline, a fertilizer high in nitrogen, and preferably with an acid reaction, is a great advantage in maintaining good bent turf. Our Special Bent Fertilizer is recommended for this purpose, but recent experiments have shown that Vigoro, though containing less nitrogen than our Special Bent, is capable of maintaining Bent Turf in the very finest condition. Golf Clubs use Sulphate of Ammonia, which has an acid reaction and is high in nitrogen but is not a complete fertilizer and may burn the grass if used carelessly.

These Bent Grasses particularly P. E. I. Bent are not temperamental and will stand a lot of hard usage if given reasonable care and good fertilizer. A new Bent Lawn should have at least 3 inches of fine top soil over a well drained subsoil. Fertilizer should be applied at the rate of 25 lbs. to 1000 sq. ft. at least a week before seeding. Bent Seed should be mixed with fine sand or commercial humus (5 parts of sand to 1 part of seed) for even distribution. If sown too thickly it may damp off. Where spots are thin sow a little more seed, 2 lbs. of P. E. I. Bent or Seaside Bent to 1000 sq. ft. is sufficient, one pound to 1000 sq. ft. is enough for old lawns or reseeding. For Putting Greens double the amount.

Most turf weeds are discouraged by acid-reacting fertilizers and their continued use not only encourages bent grass but makes the weed problem much simpler.

The Bent Grasses are inexpensive when the amount sown to the square foot is taken into consideration.

Many owners of large estates have recently planted bent lawns by the vegetative method. This is somewhat quicker than seeding, but at least four times as expensive to plant and far more expensive and difficult to maintain.

For Spring seeding we advise 10% Italian or Domestic Ryegrass as a nurse crop on lawns only. The Ryegrass dies out in a year's time. Fertilize two or three times during the season at the rate of 25 pounds to 1000 sq. ft. and see that the fertilizer is watered into the soil and does not stay on the grass.

Certified Prince Edward Island Bent Seed

(*Agrostis tenuis* in Canada—*capillaris* or *vulgaris* in the United States)

Average purity 90 to 95 per cent. An extra hardy strain of Colonial Bent grown on Prince Edward Island under very severe winter conditions. Certified and Sealed in 50-pound bags by the Canadian Department of Agriculture. Smaller quantities resealed by us. Grows upright and spreads by underground root stocks.

Prince Edward Island Bent is the ideal bent grass for lawns because it requires less cutting, less water, and less treading than the creeping varieties. Used with Our Special Bent Fertilizer or Vigoro it requires little attention except weeding.

1 lb., \$2.00; 5 lbs., \$9.75; 10 lbs., \$19.00; 50 lbs., \$77.50; 100 lbs., \$150.00.

Certified New Brunswick Creeping Bent

(*Agrostis stolonifera* Var. *compacta*)

Seed production very limited. A new variety of true creeping bent, spreading by stolons or runners. Finer in texture than Seaside Bent and most commercial vegetative strains.

The demand is expected to be much greater than the supply. Certified and Sealed in 10-pound bags by the Canadian Department of Agriculture. Similar to Seaside Bent in general habit of growth.

1 lb., \$2.30; 5 lbs., \$11.25; 10 lbs., \$22.00.

Certified Velvet Bent Seed

(*Agrostis canina*)

A very limited quantity of pure Velvet Creeping Bent is grown on Prince Edward Island and produces what is probably the finest turf known. Fields are inspected 90% as to variety, but due to the aggressive character of P. E. I. Bent (*Agrostis tenuis*) the reclaimed seed is approximately 90% *Agrostis* species of which 60% to 70% is pure Velvet Bent. Prince Edward Island is the only source of supply other than the small quantities sometimes found in German Mixed Bent. Attempts to grow Velvet Bent in Western Canada have failed the past two seasons. About 10,000,000 seeds to the pound.

Certified and Sealed in 10-pound bags by the Canadian Department of Agriculture. Smaller quantities resealed by us.

NOTE:—The name Colonial Bent has recently been adopted to include all strains of *Agrostis tenuis*, and the name Rhode Island will eventually be dropped.

We are large importers of Bent Seed and one of the largest handlers of Government and State Certified [and Sealed] Bent Seed in the World.

Prices quoted on Bent Seed are post paid to 10 lbs. in U. S. or Freight Paid on larger quantities.

A reputation of 93 years fair dealing is back of every sale.

Buckeye Brand Certified Seaside Bent Seed

(*Agrostis maritima*—sometimes *Agrostis stolonifera maritima* and *Agrostis palustris*)

Average purity 98 to 99 per cent. The very highest quality, grown in Coos County Oregon, and Certified and Sealed in 50-pound bags by the Oregon Department of Agriculture. Sometimes called Coos County Bent. A true stoloniferous or creeping bent, spreading rapidly by means of stolons or runners. Makes ideal Putting Green turf.

On lawns, Seaside Bent will spread more quickly than upright, non-creeping sorts but requires more water and frequent cutting. If neglected it will form a tangled surface growth. Seaside Bent is in great demand by golf clubs as it is much cheaper and more satisfactory than many vegetative strains.

1 lb., \$2.30; 5 lbs., \$11.25; 10 lbs., \$22.00; 50 lbs., \$92.50; 100 lbs., \$180.00.

REMEMBER:—The Bent Grasses require slightly more attention and care than the common grasses on alkaline soils as they are growing under rather artificial conditions. On acid soils they are in their natural environment. Our Special Bent Fertilizer or Vigoro will maintain successful bent turf on alkaline soils.

Prince Edward Island Bent is native to the drier places and Seaside Bent to moist locations. Each thrives best as native conditions are approximated.

South German Mixed Bent

A natural mixture, chiefly Colonial Bent, containing sometimes a slight amount of Creeping Bent and a somewhat larger quantity of Velvet Bent. No two lots alike and often contains Redtop. Our South German Mixed Bent is offered in two grades, 75% and 85% pure. Those desiring some Velvet Bent in their lawns and who do not object to a mixed surface of many strains can sow German Bent to advantage. Purity, compared to Certified seed, should be taken into consideration.

1 lb., \$1.25; 5 lbs., \$6.00; 10 lbs., \$11.50; 50 lbs., \$55.00; 100 lbs., \$250.00. Second Grade 10c per lb. less.

Rhode Island Bent or Colonial Bent

New Zealand grown. Also known as Colonial Bent or Browntop (*Agrostis tenuis*, *capillaris* or *vulgaris*). Botanically the same as Prince Edward Island Bent but grown under mild winter conditions. Not Certified but usually high in purity. Definite characteristics as to hardness and freedom from disease not fully established. We offer seed 98 to 99 per cent in purity and recommend it for all locations where through snow coverage or mild climate, extra winter-hardiness is not a factor.

1 lb., \$1.25; 5 lbs., \$6.00; 10 lbs., \$11.50; 50 lbs., \$55.00; 100 lbs., \$250.00.

MCCULLOUGH'S GRASS SEEDS

Recleaners and Specialists in Grass Seeds for 93 Years

The J. M. McCullough's Sons Company have been Recleaners and Specialists in Grass Seeds for 93 years and have established a reputation second to none for prompt and reliable service.

We have always recognized the importance of co-operation with all government agencies for the improvement of agriculture and were among the first seed houses in the United States to establish a testing laboratory which has been in constant operation for over twenty years.

All seeds after being recleaned are tested for both purity and germination in our well equipped laboratory, and tagged to comply with state seed laws, although as tests are subject to some variation they can not be guaranteed.

Our prices include delivery to freight or express depots here, purchaser paying transportation charges. We make no charge for burlap bags for **Blue Grass, Red Top in Chaff, Orchard Grass, Perennial Rye** and other light **Grass Seeds**. **Seamless bags for Clovers, Timothy, Fancy Red Top** and other heavy **Seeds and Seed Grains** are 30c each, extra. The number of pounds to the bushel, in brackets is the old way of offering grasses, and is mentioned merely for reference. Owing to market fluctuations, it is impossible to guarantee prices. All orders will be filled at lowest market price on the day of receipt.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

KENTUCKY BLUE GRASS

(*Poa Pratensis*)

ALSO known as June Grass, Green Grass, etc. This is rated as the finest permanent pasture grass. Especially suited to rich lands. It is the grass of the famous and fertile limestone soils of Kentucky, and is no less a favorite all through the Northern States. A perfect lawn grass. Sow 10 lbs. to 1000 sq. ft. for lawns, and 150 lbs. per acre for fairways. 2 bushels (28 lbs.) to the acre for pasture (14 lbs. per bushel).

Kentucky Blue Grass Seed, Fancy Cleaned.

(Ask for Price.)

ORCHARD GRASS

(*Dactylis Glomerata*)

ROUGH Cocksfoot. *Perennial*. Height, 3 feet. It blossoms about the same time as Red Clover, making it, on that account, a desirable mixture with that plant. It is exceedingly palatable to stock of all kinds, and its powers of enduring the cropping of cattle commend it as one of the very best pasture grasses. Sow 25 to 35 lbs. to the acre. (14 lbs. per bushel.) Market price.

RED TOP GRASS

Agrostis stolonifera var. *major*., also *Agrostis alba*.

HERD'S Grass, Quick Grass. *Perennial*. Height, 1 to 2 feet. Valuable either for lawn mixtures, mixing in hay, or permanent pasture grasses; succeeds almost everywhere, but reaches its highest state of perfection in a moist, rich soil, in which it attains a height of 2 to 2½ feet.

Fancy Red Top Pure Seed.

Weight, about 30 lbs. per bushel. Sow 10 to 12 lbs. per acre for Hay and Pasture. For Putting Greens, sow 5 lbs. to 1,000 square feet. For Fairways, sow 50 to 75 lbs. per acre.

(Ask for Price.)

Meadow Fescue (*Festuca Pratensis*)

(Erroneously called English Blue Grass)

HIGHLY valuable for permanent grass land. Does not, however, attain its full productive power till the second or third year. Relished by live stock, both in hay and permanent pasture and is one of the most desirable grasses for general culture. Sow 30 to 40 lbs. to the acre, (24 lbs. per bushel.) This is the true Evergreen Grass of the South. Price on application.

Perennial or English Rye Grass

(*Lolium Perenne*)

IMPORTED English Blue Grass. Height, 15 to 24 inches. Considered invaluable for permanent pastures. It produces an abundance of remarkably fine foliage, tillers out close to the ground and soon forms a compact sward. After being cut it grows up in a very short time and remains bright and green throughout the season, consequently is well adapted for lawn mixtures. Valuable for shady places. Also a good variety for hay, if cut when in blossom, as it is then most nutritious. Sow, if alone, 50 to 60 lbs. per acre, (24 lbs. per bushel). (Ask for Price).

NOTE:—Rye Grass production is increasing in America and supplies are this season drawn from the United States. American Rye Grass contains 50 to 75% Italian Rye Grass. Seed is heavier and of higher germination than imported Seed but essentially the same in growth.

We prefer Domestic or Italian Rye Grass when used as a nurse crop with Bent or other Lawn Grasses, as it dies out in the second season. The Perennial sometimes lasts for several years and dies out in patches. Sow 15 lbs. to 1000 square feet for Winter Putting Greens in the South; 10 lbs. to 1000 square feet for quick lawns; 10 to 15% in mixtures as a nurse crop.

Heavy Recleaned Short Seeded Rye Grass

SIMILAR to Pacey's. Recleaned from American grown seed. Sow, if alone, 50 to 60 lbs. per acre. (Ask for Price.)

Italian Rye Grass

(*Lolium Italicum*)

ANNUAL. Height, 18 to 30 inches. As it is not perennial, it is not adapted for permanent pastures, but for one or two years hay it is unsurpassed. Sow, if alone, 45 to 50 lbs. per acre. Used in the South as a winter grass for Putting Greens. (18 lbs. per bushel.) (Ask for Price.)

White or Dutch Clover

(*Trifolium Repens*)

THIS variety thrives on nearly all soils; is a low close-growing Clover and on account of its earliness and hardness should be used in mixtures for permanent pastures. Is very hardy, spreads rapidly, acts as a binder, and when mixed with other grasses for lawn purposes is very desirable. Is also excellent for bee food. Sow 6 to 8 lbs. per acre.

Aggressive on lawns and helps to keep out weeds. Sow 2 to 3 lbs. to 1000 sq. ft. (Ask for Price.)

Mixtures of Grass Seed for all Purposes

Let us know your requirements and we will gladly prescribe a mixture best suited to conditions.

GRASS SEEDS—Continued

Awnless Brome Grass (*Bromus Inermis*)

A HARDY perennial, standing extremes of heat, cold and drought. In the south it remains green all winter. It will grow well on all kinds of soil. The seed should be sown as early in the spring as the ground can be worked. (10 lbs. per bushel). Sow 25 to 30 lbs. to the acre. Market price.

Bermuda Grass (*Cynodon Dactylon*)

A VALUABLE grass for the south and for tropical climates; will not endure frost. Sow 10 to 15 lbs. per acre. Write for price.

Canadian Blue Grass (*Poa Compressa*)

Also called Flat-Stemmed Poa, Flat-Stalked Meadow Grass. Grows a foot or more tall. Rather open turf. A good shady place grass and for the rough on Golf Courses. Sow 30 to 40 pounds per acre for pastures—50 to 60 lbs. for turf. (Ask for Price.)

Sheep's Fescue (*Festuca Ovina*)

Perennial. Height varies from 6 to 20 inches. Grows naturally on light, dry, sandy soils. Sheep are very fond of it. Used in the rough on golf courses. (14 lbs. per bushel). Sow 40 to 60 lbs. per acre. 8 lbs. to 1000 sq. ft. on lawns. (Ask for Price.)

Hard Fescue (*Festuca Duriuscula*)

Similar to Sheep's Fescue. Used in the rough on Golf Courses. (Ask for Price.)

Poa Annua

Valuable in certain locations as a Putting Green grass and for shady places. Sow 12 to 15 lbs. to 1000 sq. ft. (Ask for Price.)

Rough Stalked Meadow Grass

(*Poa Trivialis*)

No Grass is better adapted for pleasure grounds, particularly under trees, as it will not only grow in such places, but forms a fine sward where few other Grasses can exist. A fine grass for dry ground under Bay windows, overlapping roofs and shady side yards. Sow 10 lbs. to 1000 sq. ft. (Ask for Price.)

Red or Chewings Fescue (*Festuca Rubra*)

A CREEPING-ROOTED species, forming a close and lasting turf and especially adapted for dry sandy soils. It resists extreme drought and thrives on poor soils; also valuable for shady places in lawns as well as for golf courses. Another fine grass for dry ground under Bay windows, overlapping roofs and shady side yards. On Fairways sow 175 to 200 lbs. per acre, 8 to 10 lbs. to 1000 sq. ft. (Ask for Price.)

Tall Meadow Oat Grass (*Avena Elatior*)

A perennial. Has broad, flat leaves, and grows about 3 feet high; has an abundance of long, fibrous roots, penetrating deeply in the soil, enabling it to withstand drought and cold. Sow 25 to 30 lbs. per acre.

Market Price.

Timothy (*Phleum Pratense*)

Herd's Grass. Cat's-tail Grass. This Grass stands at the head for meadows. Never use less than a peck to the acre, then up to one-half bushel, as to circumstances.

Market Price.

Wood Meadow Grass

Used in shady places, but now displaced to a large extent by Rough Stalked Meadow Grass. Market Price.

McCULLOUGH'S HIGH-GRADE FARM SEEDS

We are large wholesale dealers and recleaners of all Farm Seeds and our Buckeye Brand Seeds are well known to farmers in Ohio and surrounding states.

Buckeye Brand Seeds are standard No. 1 quality on the crop and are correctly tagged to comply with state laws. Our slogan is:

"Quality in the Bag same as on the Tag."

So much descriptive literature is available through State and National Experiment Stations that description here of the various standard Farm Seeds is needless.

Write for Our Special Price List of Farm Seeds, Seed Corn, Potatoes, Soy Beans and other seeds.

NITRAGIN, Legume Inoculation

Inoculate Alfalfa and Other Clovers and Vetches with Nitragin

NITRAGIN is an old, reliable inoculator. The contents are always fresh, living bacteria to feed your plants. Easy to use. Sent by mail or express, prepaid.

For Alfalfa, Clover, Vetch, Peas and Beans

¼ bushel size (15 lbs. of Seed)	\$0.40
½ bushel size (30 lbs. of Seed) . . . . .	.60
1 bushel size (60 lbs. of Seed)	1.00
5 bushel size (300 lbs. of Seed)	4.75

For Soy Beans and Cow Peas

1 bushel size (60 lbs. of Seed)	\$0.40
2 bushel size (120 lbs. of Seed) . . . . .	.70
5 bushel size (300 lbs. of Seed)	1.50
10 bushel size (600 lbs. of Seed)	2.50

In ordering, be sure to name crop to be inoculated.

GARDEN SIZE NITRAGIN—Beans, Peas and Sweet Peas, (3 in one), 20c each.

DRY INOCULATION—Dry-Inoc—Legume-Inoc

FOR SMALL SEED—Alfalfa and all Clovers

½ bushel size	\$0.40
1 bushel size . . . . .	.65
2 ½ bushel size	1.50

FOR LARGE SEED—Beans, Peas, Soy Beans, etc.

1 bushel size	\$0.40
2 bushel size . . . . .	.65
5 bushel size	1.50

GARDEN SIZE—for all Garden Peas and Beans, 15c per package

McCULLOUGH'S SELECTED FLOWER SEEDS

Every year we carefully revise our list of flower seeds, add a number of new sorts and discard all inferior varieties. Our collection will be found to contain everything really desirable. Our stock of seeds is of the highest possible quality.

YOU will notice that all of our descriptions of flowers are classified as "annual," "hardy annual," "tender annual," "perennial," "biennial," etc.; these descriptions, when properly understood, will tell much about planting.

ANNUALS attain full growth from seed, bloom and die in one season. Sow **HARDY ANNUALS** outside late in March or during April, or earlier indoors for transplanting outside. Hardy annuals may also be sown in the fall for earlier spring blooming.

HALF HARDY and TENDER ANNUALS should be sown in the house or hot-bed and not be sown or transplanted outside until the weather is settled and warm, or if left out during the winter, should have protection.

BIENNIALS are plants that bloom the second year from seed, and then die. Many of these will bloom the first year if sown early. Sow under same conditions as perennials.

PERENNIALS are plants that bloom the second year from seed and the plant lives and blooms for many years. If sown in early spring, many perennials will bloom the first year from seed. Tender and half-hardy perennials are best sown in spring after frost is over. Hardy perennials may be sown in May or June and again in August or September for next year's flowers.

TENDER OR GREENHOUSE means the plant will not stand the least frost. All such must be planted late in spring, or in a greenhouse.

HARD SHELLED SEED, like Canna, and Japanese Morning Glory, Moon Vine, etc., should be soaked in warm water 36 hours before planting.

HOW TO SOW FLOWER SEED: A common mistake in sowing flower, as well as other seeds, is covering too deeply. The exception to this is the Sweet Pea, which is seldom planted deep enough. As a general rule, cover small seeds only to the depth of the thickness of the seeds; or, with medium-sized seeds, like Balsam, Zinnias, etc., half an inch or so is none too much. Such fine seeds as Petunias, Portulacas, etc., need only to be pressed into the soil with a piece of board. Always press the earth after sowing all flower seeds, because there is danger of their drying up before the roots can get firm hold of the soil. Seeds of the hardier annuals may be sown where they are to grow; but, as a rule, it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should be watered frequently. Provide some support for all such plants as require it.

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked.

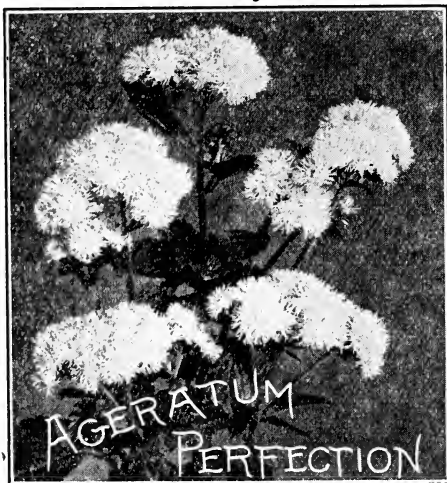
ABUTILON (Flowering Maple)

ELEGANT flowering plants of strong and easy cultivation, producing various colored, drooping bell-shaped flowers. Sown indoors any time before April, they will produce plants that will flower outdoors the first season and indoors all winter. *Half-hardy Perennial.*

1—**Fine Mixed.** Of choice varieties and colors... 15c pkt.

ACHILLEA (Milfoil, or Yarrow)

2—**Ptarmica "The Pearl."** One of the best hardy white perennials. Grows about 2 feet high, and from spring to frost is covered with heads of purest white double flowers. Easily grown from seed, flowering the first season, if sown early... 10c pkt.



ACROCLINIUM

3—**Double Mixed.** An "Everlasting," growing about 15 inches high, bearing white or rosy pink flowers, which, when cut in the bud state, can be dried and used in winter bouquets. *Half-hardy Annual.*

¼ oz., 20c; 10c pkt.

ADLUMIA

(Mountain Fringe, Allegheny Vine, or Climbing Fumitory)

4—**Cirrhusa.** A graceful climber, but, as it resows itself year after year, it might be considered perennial. The feathery foliage closely resembles that of the Maidenhair Fern.

The flowers are tube-shaped, flesh-colored, and completely cover the plant. For covering trellises, stumps of trees, etc., it is very desirable. Flowers the first year from seed. *Hardy Biennial.*... 10c pkt.

AGERATUM (Floss Flower)

ONE of the very best bedding plants, being literally a sheet of bloom from early summer till frost. Unlike many bedding plants, their flowers are not liable to be spoiled by rain, nor do the colors fade out. The blue varieties are without doubt the most satisfactory bedding plants of this color for our trying climate. Easily raised from seed, which is usually started in a hot-bed or window and transferred to the open ground in May. Can also be sown outdoors in May. *Half-hardy Annual.*

5—**Blue Perfection.** This is the darkest colored of all large flowering Ageratums. Color, deep amethyst-blue; compact growth; fine bedder. (See cut) ¼ oz., 25c; ¼ oz., 50c; 10c pkt.

6—**Blue Star.** Of dwarf and even growth; the tiny bushes, not over 4 to 5 inches high, are densely covered with bright blue flowers; a fine variety for edging... ¼ oz., 50c; 10c pkt.

AGROSTEMMA

(Rose of Heaven, Mullein Pink)

7—**Coronaria.** An attractive free-flowering hardy perennial of easy culture, producing glowing crimson flowers like a single pink, and silvery-white foliage; blooms the first season; fine for cutting. 2 feet... ¼ oz., 25c; 10c pkt.

ALLEGHENY VINE. (See Adlumia.)

All 10c Packets of Flower Seeds are 3 Packets for 25c. 13 Packets for \$1.00.

ALYSSUM (Mad-Wort)

PRETTY little plants for beds, vases, baskets, edgings or rockwork, blooming profusely all summer; useful also for winter-flowering. *Hardy Annual.*

- 8—**Little Gem, or Carpet of Snow.** Of dwarf, compact habit, but 4 inches high. It begins to bloom when quite small, and the plants are a solid mass of white from spring to late autumn, and undoubtedly the best white-flowering edging plant in the list. (See cut.) $\frac{1}{4}$ oz., 25c; oz., 60c; 10c pkt.
- 9—**Lilac Queen.** A very pretty deep lavender-lilac, of dwarf compact habit; 6 inches. $\frac{1}{4}$ oz., 25c; oz., 75c; 10c pkt.
- 10—**Sweet Alyssum.** (*A. Maritimum*). Of trailing habit, flowers white; 9 inches. $\frac{1}{2}$ oz., 25c; oz., 40c; 10c pkt.
- 11—**Saxatile Compactum.** (Basket of Gold.) Showy, bright yellow flowers, excellent for rockwork and edge or border. *Hardy Perennial.* 1 foot. 10c Pkt.

AMMOBIUM

One of the hardiest of everlastings, valuable for forming winter bouquets, in connection with grasses and other everlastings. The flowers should be gathered before fully opened. 2 feet. *Hardy Annual.*

- 12—**Alatum Grandiflorum.** White, large flower. 10c pkt.

AMPELOPSIS

- 13—**Veitchi.** (Boston or Japanese Ivy.) A *Hardy Perennial* climber from Japan. The best and most popular climber for covering brick or stone walls. $\frac{1}{4}$ oz., 15c; oz., 50c; 10c pkt.

ANCHUSA

- 14—**Capensis.** (Cape Forget-me-not). A fine free-growing annual variety about 18 inches high with sprays of lovely Forget-me-not blue flowers; blooms all summer. $\frac{1}{2}$ oz., 25c; 10c pkt.
- 15—**Italica Dropmore Variety.** One of the best hardy perennials and becoming more popular each season, grows 3 to 5 feet high, and bears in abundance flowers of the richest gentian-blue during May and June. $\frac{1}{2}$ oz., 40c; 10c pkt.

ANTHEMIS (Hardy Marguerite)

- 16—**Kelwayi.** A most satisfactory hardy perennial, bearing all summer daisy-like golden-yellow blossoms; excellent for cutting. 2 feet. 10c pkt.

ARABIS (Rock Cross)

- 17—**Alpina.** Early Spring flowering plant, especially adapted for edging and rockery; plants form a dense carpet completely covered with pure white blossoms in May. 6 inches. *Hardy Perennial.* $\frac{1}{2}$ oz., 25c; 10c Pkt.

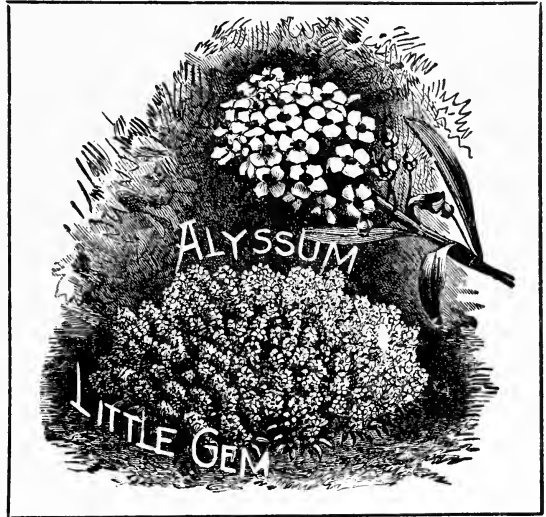
ARCTOTIS (African Daisy)

- 18—**Grandis.** Forms much-branched bushes 2 to 3 feet high; its flowers are large and showy, being pure white on the upper surface, the reverse of petals pale lilac-blue; blooms early in July and continues until hard frost. It delights in a sunny situation. *Half-hardy Annual.* $\frac{1}{2}$ oz., 30c; 10c pkt.



Antirrhinum

All 10c Packets of Flower Seeds are 3 Packets for 25c. 13 Packets for \$1.00.

**ANTIRRHINUM**

ANTIRRHINUMS or Snapdragons are one of the best cut flowers which can readily be grown from seed.

They succeed best in a rather light soil, in a sunny position. For early flowering, sow in fall, protecting the plants with a covering of leaves through the winter. Sown in spring, they bloom by mid-summer, and if the flowers are cut freely the flowering is continuous till fall. If intended for winter flowering in the house, cut them well back in September. The Snapdragon, like most perennials and biennials which bloom the first year, is treated like an annual and sown every year. *Half-hardy Perennial.* (See cut.)

TALL, GIANT FLOWERING

Flowers nearly double the size of the older sorts.

- 19—**Apple Blossom.** Rosy pink, with white tube. 10c pkt.
- 20—**Copper King.** Velvety copper scarlet. 10c pkt.
- 21—**Diamond.** Carmine scarlet, lilac tube. 10c pkt.
- 22—**Old Gold.** Deep golden yellow. 10c pkt.
- 23—**Snowflake.** Pure white with yellow tube. 10c pkt.
- 24—**The Rose.** Rose pink. 10c pkt.
- Special Collection.** One packet each of the above 6 varieties. 65c.
- 25—**Tall Giant Mixed.** A splendid mixture, containing all the colors, magnificent, large individual flowers. All these varieties $\frac{1}{4}$ oz., 40c; 10c pkt.

SEMI-DWARF GIANT FLOWERING

- Are particularly good for bedding, as they require no staking. The flowers are most wonderful, in many new shades and tints.
- 26—**Defiance.** Orange scarlet. 10c pkt.
- 27—**Empress.** Rich velvety crimson. 10c pkt.
- 28—**Gloria.** Rich deep rose pink. 10c pkt.
- 29—**Golden Queen.** Pure yellow. 10c pkt.
- 30—**Jennie Schneider.** Salmon pink. 10c pkt.
- 31—**Philadelphia Pink.** Silver pink. 10c pkt.
- 32—**Purity.** Pure white. 10c pkt.
- 33—**Silver Pink.** Pearly pink, self colored. 10c pkt.
- Special Collection.** One packet each of the above 8 varieties. 65c.
- 34—**Half-Dwarf Mixed.** Large variety of colors; best for bedding. $\frac{1}{4}$ oz., 25c; 10c pkt.

ASPARAGUS

- 35—**Plumosus Nanus.** (Asparagus Fern.) This graceful climbing Asparagus has fine foliage, and will last for weeks after being cut. It is an excellent house plant. *Greenhouse Perennial.* 10c pkt.
- 36—**Sprengeri.** (Emerald Feather.) One of the best plants to grow in baskets, for greenhouse or for outdoors in the summer. The fronds frequently grow 4 feet long, and are now considered indispensable in all fine decorations; grows readily from seed. *Greenhouse Perennial.* 10c pkt.

ASTERS

ASTERS are one of the most important summer and autumn flowers, and receive special care at our hands. Our list comprises only such sorts as can be planted with perfect confidence that nothing better is procurable, no matter at what price or from what source.

The early sorts begin blooming in July, followed by the mid-season kinds, which flower during August; then the late-flowering varieties, which are at their best through September.

It is quite easy, therefore, with a little care in the selection of the varieties, to have Asters in flower from the first days in July until hard frost.

Asters will thrive in any good soil, prepared in the same way as you would for a crop of vegetables, but it is well to remember that any extra care taken in the preparation of the soil is repaid by finer plants, larger blooms, with longer stems and more profuse flowering. They should have an open, sunny position, and prefer a good, heavy loamy soil, enriched with a liberal quantity of thoroughly rotted manure, and the addition of wood ashes or air-slaked lime, and we do not advise growing them on the same ground two years in succession.

Sow either in the open ground in May, or in March or April sow in cold frame, spent hotbed, or pots or boxes in the house, covering the seed with about one-fourth inch of good soil. When the plants are strong enough transplant about 18 inches apart in deeply dug well-prepared beds. *Half-hardy Annual.*

Giant Branching Asters

This superb strain is of American origin and is especially adapted to our climatic conditions.

The plants form strong, branching bushes, 2 to 2½ feet high. The form of the flowers, together with the length of the stems, places them at the head of Asters for cutting. They come into bloom from two to three weeks after the average type, usually being at their best during September.

- 37—Crimson.....10c pkt.
- 38—Lavender.....10c pkt.
- 39—Deep Purple.....10c pkt.
- 40—Rose.....10c pkt.
- 41—Shell Pink.....10c pkt.
- 42—Pure White.....10c pkt.

Collection. One pkt. each of the above 6 varieties.....50c.

- 43—Finest Mixed. All colors.
½ oz., 25c; ¼ oz., 40c; 10c pkt.

Improved Giant Comet Asters

The finest type of the Giant Comet, or Ostrich Feather Asters. Much larger than the Giant Comet, the petals longer, more curled and twisted, and produced in greater abundance. Borne on long stems.

- 44—Crimson.....10c pkt.
- 45—Rose.....10c pkt.
- 46—Light Blue.....10c pkt.
- 47—Dark Blue.....10c pkt.
- 48—Pink.....10c pkt.
- 49—White.....10c pkt.

Collection. One pkt. each of the above 6 varieties.....50c.

- 50—Finest Mixed. All colors.
½ oz., 30c; ¼ oz., 50c; 10c pkt.

Royal Asters

(The Early Branching Aster)

The flowers are large and firm; the stems long and stiff and the colors are decided and pleasing. The plants grow about 24 inches high and come into bloom about 10 days before the Giant Branching Aster.

- 51—Lavender.....10c pkt.
- 52—Pink.....10c pkt.
- 53—White.....10c pkt.
- 54—Purple.....10c pkt.
- 55—Rose.....10c pkt.

Collection. One pkt. each of the above 5 varieties.....40c.

- 56—Finest Mixed. Many colors.
½ oz., 30c; ¼ oz., 50c; 10c pkt.



King Asters

The habit is similar to the popular Giant Branching, vigorous in growth, long stiff stems. In form the flower is entirely distinct from any other variety; petals somewhat resemble the quilled varieties, but are much larger and broader, those in the center being curled and incurved, completely covering the crown. In shape and size the bloom is round, full and very large.

- 57—Crimson.....10c pkt.
- 58—Rose.....10c pkt.
- 59—Violet.....10c pkt.
- 60—Lavender.....10c pkt.
- 61—Pink.....10c pkt.
- 62—White.....10c pkt.

Collection. One pkt. each of the above 6 varieties.....50c.

- 63—Finest Mixed.
½ oz., 25c; ¼ oz., 40c; 10c pkt.

Queen of the Market Asters

A first-class early flowering Aster, coming into flower in July, of branching habit; flowers of good size and borne on long stems, making them exceedingly valuable for cutting; one foot.

- 64—Rose.....10c pkt.
- 65—Crimson.....10c pkt.
- 66—Light Blue.....10c pkt.
- 67—Dark Blue.....10c pkt.
- 68—Pink.....10c pkt.
- 69—White.....10c pkt.

Collection. One pkt. each of the above 6 varieties.....50c.

- 70—Finest Mixed. All colors.
½ oz., 35c; 10c pkt.

Beauty Asters

These late-flowering Asters are a valuable addition. Plants grow two to three feet high, of branching habit, commencing to bloom in September and lasting until destroyed by frost.

The large and perfectly double flowers are borne on long, stout stems. Splendid cut-flower variety.

- 71—Azure Fairy.....10c pkt.
- 72—Carmine Rose.....10c pkt.
- 73—Crimson.....10c pkt.
- 74—Pink.....10c pkt.
- 75—Purple.....10c pkt.
- 76—White.....10c pkt.

Collection.—One packet each of the above six varieties.....50c.

- 77—Finest Mixed.
½ oz., 40c; ¼ oz., 75c; 10c pkt.

Express Extra Early Asters

Early flowering Asters of great merit; come into bloom in the open ground with us by the middle of July. They are the largest early Asters, flower 3½ to 4 inches across, of double Comet type; splendid substance and long stems; plants healthy and sturdy, branching habit; 18 inches high; free bloomers.

- 78—Dark Blue.....10c pkt.
- 79—Light Blue.....10c pkt.
- 80—Rose.....10c pkt.
- 81—White.....10c pkt.

Collection. One pkt. each of the above 4 varieties.....35c.

- 82—Finest Mixed. All colors.
½ oz., 40c; ¼ oz., 75c; 10c pkt.

California Sunshine Asters

After several years of hybridizing and special selection we now offer a strain which fills the special requirements for florists. They retain their dainty appearance, and borne on long stout stems. This is a distinct improvement on the original Sunshine.

- 83—Carmine.....25c pkt.
- 84—Flesh.....25c pkt.
- 85—Pink.....25c pkt.
- 86—Lavender.....25c pkt.
- 87—Violet.....25c pkt.

Collection. One pkt. each of the above 5 varieties.....\$1.00.

- 88—Finest Mixed.....25c pkt.

McCullough's Premier Mixed

89—This is the finest mixture of Asters in existence, and the most critical lovers of this flower will be astonished at the wide range of colors and varieties given in this strain.

½ oz., 40c; ¼ oz., 75c; 10c pkt.

AQUILEGIA, OR COLUMBINE

CHARMING hardy plants, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. For planting in permanent borders or edges of shrubbery this old-fashioned favorite is one of the best. They thrive well with ordinary garden culture, but do best in partially shaded nooks. Few hardy plants are so easily grown from seed. Will bloom first season if sown very early. *Hardy Biennial.*

- 90—*Coerulea*. (Rocky Mountain Columbine.) Sepals deep blue, petals white; extra fine, 2 feet ¼ oz., 30c; 10c pkt.
 91—*Coerulea Hybrida*, "Rose Queen." A beautiful variety, producing in great profusion very graceful, large-flowered, long-spurred flowers, shading from light pink to dark rose with white center and yellow anthers ... ¼ oz., 35c; 10c pkt.
 92—*McCullough's Long Spurred Hybrids*. A beautiful strain, comprising shades and combinations of blue, white, yellow, orange, scarlet and bright rose-pink in large flowers with long spurs; the finest to be had ¼ oz., 35c; 10c pkt.
 93—*Double*, all colors, mixed ¼ oz., 25c; 10c pkt.
 94—*Single*, all colors, mixed ¼ oz., 25c; 10c pkt.

AUBRIETIA (Rainbow Rock Cress)

- 95—*Large-flowering Hybrids*. A beautiful dwarf rock plant, covered with sheets of bright flowers in spring and early summer; 6 inches 20c pkt.

BALLOON VINE

(Love-in-a-Puff) (*Cardiospermum*)

- 96—A rapid-growing annual climber; succeeds best in a light soil and warm situation; flowers white; seed vessels look like miniature balloons and are of great interest to children. *Half-hardy Annual*..... ¼ oz., 20c; 10c pkt.

BACHELOR'S BUTTON, BLUE-BOTTLE OR RAGGED SAILOR. (See *Cyanus*.)

BLACK-EYED SUSAN. (See *Thunbergia*.)

BALSAM

(Lady Slipper, or Touch-Me-Not)

ONE of the oldest and best-known summer-blooming annuals, of easy culture. Desirable for garden or pot culture. The soil should be of the richest and best quality. Set about 15 inches apart, and give them plenty of manure water. *Tender Annual*; two feet.

- 97—*Salmon Pink*. Brilliant salmon-rose flowers; very double, of finest camellia flowered type..... 10c pkt.
 98—*White Perfection*. The finest pure white grown; flowers unusually large, solid and double..... 10c pkt.
 99—*Scarlet*. Brilliant fiery scarlet..... 10c pkt.
 100—*Double Camellia Flowered Mixed*. Of perfect form, beautiful colors..... ¼ oz., 20c; 10c pkt.
 101—*McCullough's Premier Mixed*. Unrivalled for variety of color and size of flower; includes all the most desirable shades. (See cut.)..... ¼ oz., 30c; 10c pkt.



Nature constantly asks the question, which do you prefer, flowers or weeds—ugliness or beauty?



BALSAM, Apple or Pear

VERY curious climbing vine, with ornamental foliage, fruit golden yellow, warted, and when ripe opens, showing the seed and its brilliant carmine interior. Ten feet. *Tender Annual*.

- 102—*Balsam Pear*. (*Momordica Charantia*.) Pear-shaped fruit: the fruit is long and used medicinally. Oz., 40c; 10c pkt.
 103—*Balsam Apple*. (*Momordica Balsamina*.) Round, apple-shaped fruit..... Oz., 40c; 10c pkt.

BEGONIAS

Ever-blooming Bedding Varieties

THE following are varieties of *Begonia Semperflorens*, doing equally well in full sunlight, or in positions partially or wholly in shade. They grow about one foot high and form dense bushes, which, from May until frost are completely hidden with flowers. As pot plants for winter flowering they are superb. Easily raised from seed, which should be started indoors or in a hot-bed. *Tender Perennials*.

- 104—*Gracilis Luminosa*. This differs from *Begonia Gracilis* in the lustrous reddish-brown color of the foliage, while the flowers measuring 1 to 1½ inches across, are of a fiery dark scarlet. It is very free flowering, and where massed produces a splendid effect. 15c pkt.
 105—*Semperflorens Vernon*. Bright orange-carmine flower; deep red foliage..... 10c pkt.
 106—*Semperflorens, Bertha Bofinger*. Grows only 6 inches high and is one of the dwarfest varieties of Bedding Begonias. The flowers are carmine-rose, and the foliage pale green..... 15c pkt.
 107—*Semperflorens, Single Mixed*. This mixture contains all the best varieties, ranging in color from pure white to the deepest crimson; splendid..... 10c pkt.

TUBEROUS-ROOTED BEGONIAS. (See *Bulbs*.)

BELLIS (English Daisy)

A FAVORITE perennial plant, which will stand the winter if given the protection of a few leaves or litter; in bloom from early spring until well on in the summer. The seed we offer is saved from the finest double varieties; easily raised from seed; usually sown in August, but can be sown in spring, and for best results should be sown each year; 4 inches. *Half-hardy Perennial*.

- 108—*Longfellow*. Large, double, dark pink flowers, with long, stiff stems 10c pkt.
 109—*Snowball*. A beautiful white variety with long stems and very double flowers; fine for cutting..... 10c pkt.
 110—*Giant Double*. Beautifully and densely imbricated flowers, 1½-inches in diameter. Finest mixed 10c pkt.

CALCEOLARIA

- 111—**Hybrida Grandiflora.** Unsurpassed for pot culture in the greenhouse or conservatory, producing brilliant flowers in great profusion and variety. *Greenhouse Perennial.* Mixed varieties.....25c pkt.

CALENDULA (Pot Marigold)

SHOWY free-flowering hardy annuals, growing in any good garden soil, producing a fine effect in beds or mixed borders, continuing in bloom from early summer until killed by frost; valuable also for pot culture; one foot. *Hardy Annual.* (See cut.)

- 112—**Ball's Strain.** A fine double variety of large size. Same color as Orange King and resembles it closely in all other respects. Largely grown by florists for winter blooming in greenhouses and also is excellent for the garden. $\frac{1}{4}$ oz., 75c; 10c pkt.

- 113—**Lemon Queen.** A grand variety, with double, extra large yellow flowers..... $\frac{1}{4}$ oz., 15c; 1 oz., 25c; 10c pkt.

- 114—**Orange King.** The outer petals are slightly imbricated, while those of the center are curved like those of the peony. Color rich, dark orange .. $\frac{1}{4}$ oz., 15c; 1 oz., 25c; 10c pkt.

- 115—**Radio.** The latest introduction in Calendulas entirely distinct with beautifully quilled petals forming a perfectly double flower; color rich orange..... $\frac{1}{4}$ oz., \$1.00; 15c pkt.

- 116—**Sensation.** A distinct new type of vigorous growth, the flowers borne on strong stems. Color: Brilliant orange with a scarlet sheen, with full yellow center. The blooms are flat and very large. The best orange forcing Calendula..... $\frac{1}{4}$ oz., \$1.00; 15c pkt.

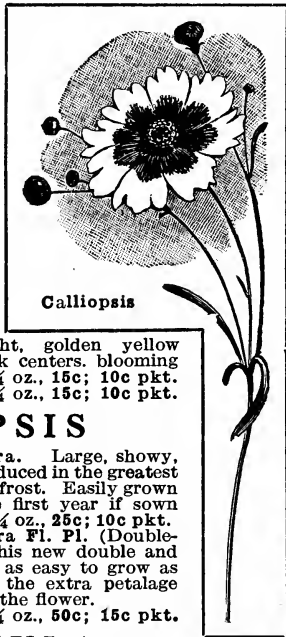
- 117—**Fine Double Mixed.** Contains the choicest sorts. $\frac{1}{2}$ oz., 15c; 1 oz., 25c; 10c pkt.

(See also Marigold.)



CALLIOPSIS

SHOWY and beautiful free-flowering annuals, of the easiest culture, doing well in any sunny position, blooming all summer and excellent for cutting and massing. It is best to sow them where they are to bloom, thinning out to stand 8 to 12 inches apart. By keeping the old flowers cut off the flowering season can be lengthened until late autumn. *Hardy Annual.* (See cut.)



- 118—**Golden Wave.** Bright, golden yellow flowers, with small, dark centers, blooming profusely..... $\frac{1}{4}$ oz., 15c; 10c pkt.

- 119—**Finest Mixed.**..... $\frac{1}{4}$ oz., 15c; 10c pkt.

COREOPSIS

- 120—**Lanceolata Grandiflora.** Large, showy, bright yellow flowers, produced in the greatest abundance from June till frost. Easily grown from seed, flowering the first year if sown early. *Hardy Perennial.* $\frac{1}{4}$ oz., 25c; 10c pkt.

- 121—**Lanceolata Grandiflora Fl. Pl.** (Double-flowering Coreopsis). This new double and semi-double form is just as easy to grow as the single-flowering and the extra petalage adds a further charm to the flower. $\frac{1}{4}$ oz., 50c; 15c pkt.

CAMPANULA

(Canterbury Bells)

THIS old-fashioned flower is a favorite with all. Stately and showy, and of the easiest culture. The seeds should be sown about April, in finely prepared, rich soil. *Hardy Biennial.*

Calycanthem. (Cup and Saucer Canterbury Bells.) They differ from the ordinary type in having an extra large calyx, which is of the same color as the flower, giving the appearance of a cup and saucer.

- 122—**Pink.** Delicate rosy-pink10c pkt.

- 123—**Blue.** A fine, clear shade10c pkt.

- 124—**White.** Pure white10c pkt.

- All colors $\frac{1}{4}$ oz., 60c.

- 125—**Finest Mixed.** All colors of the Cup and Saucer type $\frac{1}{4}$ oz., 50c; 10c pkt.

Medium (Single Canterbury Bells.) The old fashioned sort, with beautiful large bell-shaped blossoms. (See cut.)

- 126—**Single Mixed** All colors. $\frac{1}{4}$ oz., 25c; 10c pkt.

- 127—**Double Mixed.** All the double-flowering medium varieties $\frac{1}{4}$ oz., 40c; 10c pkt.



CANARY-BIRD VINE

(Tropaeolum Canariense)

- 128—A beautiful rapid annual climber, the charming little canary-colored blossoms bearing a fancied resemblance to a bird with its wings expanded. *Half-hardy Annual.* $\frac{1}{4}$ oz., 20c; 10c pkt.

CANDYTUFT

UNIVERSALLY known and cultivated and considered indispensable for cutting; one foot. *Hardy Annual.*

- 129—**Giant Hyacinth-Flowered.** The finest of all the white varieties, being a complete mass of pure white flowers, in a pyramid of bloom. $\frac{1}{4}$ oz., 30c; oz., 50c; 10c pkt.

- 130—**Lavender.** Delicate shade of rosy lavender...10c pkt.

- 131—**Rose Cardinal.** Bright carmine-rose.....10c pkt.

- 132—**White Rocket.** Pure white.....oz., 25c; 10c pkt.

- 133—**Dwarf Hybrids Mixed.**.....10c pkt.

- 134—**Mixed Colors.**..... $\frac{1}{2}$ oz., 15c; oz., 25c; 10c pkt.

PERENNIAL CANDYTUFT. (See Iberis.)

CANNA

(Indian Shot)

SOAK the seeds in warm water until they show evidence of swelling; then sow in sandy loam, and place in a hot-bed; when up to the second leaf, pot off singly. *Half-hardy Perennial.*

- 135—**Mixed.** Crozy's finest sorts, $\frac{1}{4}$ oz., 15c; oz., 40c; 10c pkt.

CARDINAL CLIMBER

(Ipomoea Quamoclit Hybrida)

- 136—The most brilliant, beautiful and distinct annual climber introduced for many years. Rapid grower with branching habit; flowers all summer; cardinal red clusters, 15 to 25 feet. *Tender Annual.*.....10c pkt.

Cardinal Climber Plants. Each, 30c; by mail, each, 35c.

CARNATION

CARNATIONS are general favorites for their delicious fragrance and richness of colors. They are indispensable, both for greenhouse culture in winter and for the garden in summer. The *Marquerite* type is best for summer flowering. *Half-hardy Perennial*.

- 137—*Marquerite*. These are deservedly the most popular Carnations with the amateur, as they begin flowering in a few months from time of sowing, producing on long, strong stems an abundance of large, double, beautifully fringed, highly scented flowers. *Half-hardy, Perennial*. Finest Mixed. All colors..... $\frac{1}{4}$ oz., 50c; 10c pkt.

CELOSIA, or Cockscomb

GRACEFUL plants, growing best in rather light soil, not too rich, producing beautiful comb-shaped flowers; grown in pots, they are fine for the greenhouse or conservatory. *Half-hardy Annual*.

- 138—*Glasgow Prize*. Enormous rich, deep crimson combs. 10c pkt.
139—*Dwarf Mixed*. Large solid heads of bloom....10c pkt.

Celosia Plumosa (Feathered Cockscomb)

Make fine plants for large beds or groups, and the plumes or flowers can be cut and dried for winter bouquets.

- 140—*Thompsoni Magnifica Crimson*. Of pyramidal growth, attaining a height of 3 feet and producing graceful, feathery plumes of the most brilliant crimson.....10c pkt.
141—*Thompsoni Magnifica Yellow*.....10c pkt.
142—*Plumosa, Mixed*.....10c pkt.
CHILDSI. (See Chinese Woolflower.)

CENTAUREAS

UNDER this name is included such popular annuals as the Cornflowers, Sweet Sultans, etc. They are perfectly hardy, will grow almost anywhere, and are in demand as cut flowers.

Cornflowers (Centaurea Cyanus)

These are also known as Bachelor's Button, Blue Bottle, Ragged Sallor and Bluet. Attractive flowers of easiest culture. Sow early in spring in the beds where they are to bloom. *Hardy Annual*. (See cut.)

- 143—*Dwarf Blue*. Single blue. $\frac{1}{2}$ oz., 15c; oz., 25c; 10c pkt.
144—*Single Mixed*. Blue, white, rose, etc. $\frac{1}{2}$ oz., 15c; oz., 25c; 10c pkt.
145—*Double Blue*. Flowers semi-double.....10c pkt.
146—*Double Pink*.....10c pkt.
147—*Double Mixed*..... $\frac{1}{2}$ oz., 15c; oz., 25c; 10c pkt.

Royal Sweet Sultans (Centaurea Imperialis)

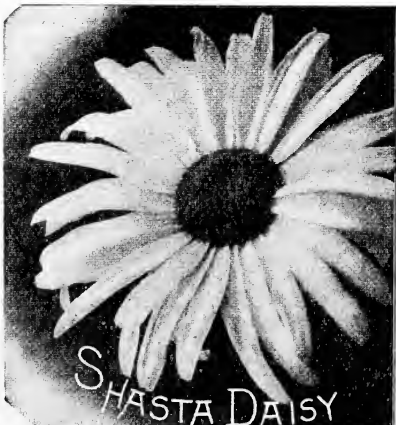
The beautiful sweet-scented, artistic-shaped flowers are borne on long, strong stems, and when cut will stand for several days in good condition. It is best to sow very early in the spring. *Hardy Annual*.

- 148—*Rose*.....10c pkt. 152—*Purple*.....10c pkt.
149—*Lavender*.....10c pkt. 153—*White*.....10c pkt.
150—*Yellow*.....10c pkt.
151—*Collection*. One packet each of the above 5 varieties 40c..... $\frac{1}{4}$ oz., 25c.
154—*Finest Mixed Colors*..... $\frac{1}{4}$ oz., 20c; 10c pkt.

White-Leaved Centaureas (Dusty Millers)

Fine for bedding, vases, hanging-baskets and pots; also extensively used for borders. Sow the seed early indoors and transplant in May. *Tender Perennial*.

- 155—*Gymnocarpa*. Fine-cut silvery foliage; the kind used most for borders; 1 foot..... $\frac{1}{4}$ oz., 20c; 10c pkt.



CENTROSEMA (The Butterfly Pea)

- 156—*Grandiflora*. Interesting and beautiful vine of rare and exquisite beauty. It blooms early in June from seed sown in April, and bears in the greatest profusion inverted pea-shaped flowers, from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches in diameter, ranging in color from a rosy violet to a reddish purple. *Hardy Perennial*.....10c pkt.

CERASTIUM (Snow in Summer)

- 157—*Tomentosum*. A very pretty dwarf, white-leaved edging or rock plant, bearing small white flowers; hardy perennial. 12 to 15 inches.....10c pkt.

CHINESE WOOLFLOWER

(Celosia Childsi)

- 158—This new Celosia grows two to three feet high, the bloom starting early with a central head, round and globular, which often reaches an immense size. Scores of branches are thrown out, each bearing a ball of scarlet wool, but not so large as the central one. None of the blooms fade in any way until hit by frost. Start seed if convenient under glass about four weeks before time to transplant to the garden. If the little plants remain too long in pots or seed beds, they will begin to set bloom, which is not desirable. Transplant to the garden as soon as danger of frost is past. *Half-hardy Annual*.....2 pkts., 25c; 15c pkt.

CHRYSANTHEMUMS

Hardy Annual Varieties

The hardy annuals are summer-flowering border plants and quite distinct from the hardy perennial varieties.

- 159—*Annual Double Mixed*. Yellow, white, etc., 10c pkt.
160—*Annual Single Mixed*. (Painted Daisies).....10c pkt.
161—*Double Early-flowering, Perennial*. A race which perfect their blooms in the open ground before frost. Easily grown from seed which may be expected to produce a fair percentage of double-flowering plants in a large range of colors.....15c pkt.

SHASTA DAISY

(Chrysanthemum Leucanthemum)

- 162—*Alaska*. A splendid hardy perennial variety, with flowers rarely less than 4 inches across, of the purest glistening white, with broad, over-lapping petals, and borne on long, strong stems; a beautiful cut flower, remaining in good condition a week or more. (See cut.) $\frac{1}{4}$ oz., 50c; 10c pkt.

CINERARIA

A WELL-KNOWN greenhouse plant, having a range and brightness of color scarcely surpassed. It may be had in bloom through the greater part of the year. *Greenhouse or Tender Annual*.

- 163—*Hybrida Grandiflora*. This strain of Cineraria can not be surpassed, either for size of flowers or beauty of color. Many of the blooms measure $2\frac{1}{2}$ inches in diameter. We have received very flattering reports from florists and private gardeners of their success with our Cineraria seed.....25c pkt.
164—*Grandiflora Nana*. Dwarf compact plants not over a foot high, with immense heads of individual flowers in a great range of beautiful colors.....25c pkt.

CLARKIA

A DESIRABLE free-growing plant, blooming in almost any soil, but when planted in rich loam its beauty is unsurpassed; will continue in bloom nearly all summer. Sow in April and May and thin out. *Hardy Annual.*
165—Elegans. Double Mixed. $\frac{1}{4}$ oz., 25c; 10c pkt.

CLEOME (Giant Spider Flower)

166—Pungens. Annual. $3\frac{1}{2}$ ft. Wherever this plant is seen it immediately attracts attention. It is now used quite extensively in public parks, and proves interesting among the Hardy Perennials. Branches freely, each branch carrying a head of crimson flowers. The stamens somewhat resemble spider's legs. Sow seed where plants are to bloom.....10c pkt.

COLEUS

167—Large-Leaved Varieties. Our strain of hybrid varieties produces the finest colored, most attractive and novel foliage plants for house or garden culture. A most interesting subject to grow from seed. Sow indoors in March or April and transplant to open ground in May. *Tender Perennial*.....2 pkts., 25c; 15c pkt.

COSMOS

BEAUTIFUL, autumn-blooming plants, they produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for autumn decoration when other flowers are scarce. Should be sown in spring in the open ground, when danger of frost is past, or the seed may be started under cover and afterwards transplanted. Plant not less than 18 inches apart in rows or in masses in beds. When the plants are about a foot high the tops should be pinched out to induce a bushy growth. They prefer a rather light, not too rich soil, but do well almost anywhere. *Half-hardy Annual.* (See cut.)

Double Crested Cosmos

One of the best novelties of recent years. These varieties produce full, round, double flowers on sturdy, bushy plants, blooming in late summer and autumn.

- 168—Double Crimson**.....10c pkt.
169—Double Pink.....10c pkt.
170—Snowball, pure white.....10c pkt.
171—Finest Mixed.....10c pkt.

Extra Early Mammoth Flowering

Seeds sown in the open ground produced plants that were covered with bloom two months before the late-flowering kinds.

- 172—Crimson. Rich**..... $\frac{1}{4}$ oz., 25c; 10c pkt.
173—Pink. A pretty shade..... $\frac{1}{4}$ oz., 25c; 10c pkt.
174—Pure White..... $\frac{1}{4}$ oz., 25c; 10c pkt.
175—Mixed, Early Cosmos..... $\frac{1}{4}$ oz., 20c; 10c pkt.

Mammoth Perfection

A magnificent selection, bearing flowers of mammoth size and perfect form.

- 176—Mammoth Crimson**..... $\frac{1}{4}$ oz., 20c; 10c pkt.
177—Pink "Lady Lenox." Bears gigantic flowers on very long stems, in color a beautiful deep rosy pink. The plant is of strong, vigorous growth, 6 to 7 feet high.
 $\frac{1}{4}$ oz., 25c; 10c pkt.
178—White "Lady Lenox." Flowers measure four to five inches in diameter, which is about three times larger than the ordinary Cosmos. Habit of plant strong and vigorous, bushes growing to a height of seven feet.
 $\frac{1}{4}$ oz., 25c; 10c pkt.
179—Mammoth Perfection, Mixed. $\frac{1}{4}$ oz., 20c; 10c pkt.

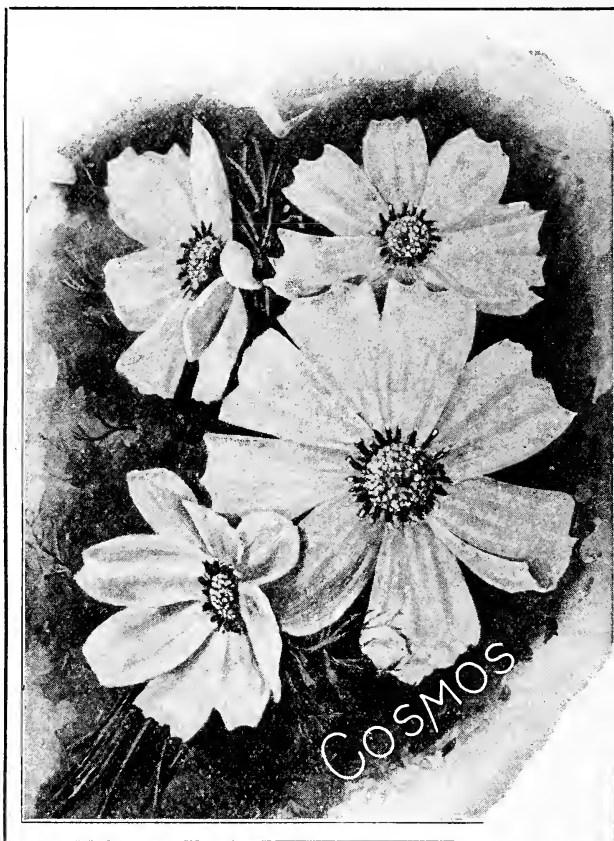
CYPRESS VINE (Ipomoea Quamoclit)

DELICATE, fern-like foliage, and masses of beautiful, small star-shaped flowers. Sow in May, first soaking the seeds in warm water for a few hours. 15 feet. *Half-hardy Annual.*

- 180—Scarlet**.....Oz., 40c; 10c pkt.
181—White.....Oz., 40c; 10c pkt.
182—Mixed, White and Scarlet.....Oz., 40c; 10c pkt.
QUAMOCILIT HYBRIDA. (See Cardinal Climber.)
CONVOLVULUS. (See Morning Glory.)
COLUMBINE. (See Aquilegia.)

CYCLAMEN

183—Giant-Flowered. (Persicum Giganteum.) A popular pot-plant for winter and spring-flowering. Seedlings bloom in eight to ten months. *Greenhouse Perennial.* Best strains, mixed.....25c pkt.



COBAEA SCANDENS (Cathedral Bells)

184—Purple Lilac. A magnificent summer climber, of rapid growth, bearing large, bell-shaped, purple flowers. In sowing, place the seeds edgewise and cover lightly. *Tender Perennial*.....10c pkt.
Cobaea Scandens Plants.
 30c each; \$2.50 for 10, (by mail, 35c each.)

DAHLIA

DAHLIAS are easily grown from seed and bloom the first season. The earlier they are started the better, which can be done nicely in a box in a sunny window, or the greenhouse. Protect the roots during winter in a dry cellar in sand. *Half-hardy Perennial.*

Double Flowering

- 185—Cactus Varieties.** Most popular at the present time, distinct and elegant; petals pointed.....10c pkt.
186—Double Large-Flowering. This mixture is composed of the finest large-flowering double varieties...10c pkt.

Single Flowering

- 187—Single Giant Perfection.** This strain produces flowers of immense size, averaging 6 inches across, in a great variety of coloring..... $\frac{1}{4}$ oz., 50c; 10c pkt.
188—Coltness Hybrids. These bedding Dahlias grow from one to one and a half feet in height, plants of a bushy habit. Will produce flowers freely from seed the first year. Continues in flower from early July until destroyed by frost.....15c pkt.

See McCullough's Collection of
"Easy to Grow" Flower Seeds. It
 may save you money.
 Illustrated on page 100.

DELPHINIUM (Hardy Perennial Larkspur)

ONE of the most exquisite blue-tinted flowers that we have. Very effective planted in beds, masses or borders. Plant $1\frac{1}{2}$ to 2 feet apart each way. Perennial varieties should be sown in the fall or early in the spring, transplanting to the open ground. *Hardy Perennial.*

- 189—**Giant-Flowering Hybrids.** These magnificent Hybrids, the grandest of Delphiniums in existence, produce beautiful spikes of immense flowers, single, semi-double and double. Flower spikes are from 2 to 3 feet in length. Colors are beautiful, ranging from pure white through all shades of lavender and blue. (See cut.) $\frac{1}{2}$ oz. 75c; 15c pkt.
- 190—**Belladonna.** (Everblooming Hardy Larkspur.) Free blooming Hardy Larkspur, never being out of flower from the end of June until frost. The clear turquoise-blue of its flowers is not equaled for delicacy and beauty by any other flower $\frac{1}{2}$ oz. 75c; 15c pkt.
- 191—**Bellamosum.** This variety is identical in habit and growth with the Belladonna, but with rich, deep blue flowers. $\frac{1}{2}$ oz. 75c; 15c pkt.
- 192—**Hollyhock Strain.** These are the greatest advance in Delphiniums. Their graceful spire shaped spikes of enormous size and beauty of form are rapidly bringing them to the front as the most popular flower for cutting or the garden. This mixture contains all the colors in Delphiniums, including both double and single flowers. $\frac{1}{2}$ oz. \$1.00; 20c pkt.
- 193—**Mixed Chinese Varieties.** This mixture contains a great variety of shades, from pure white to gentian-blue. $\frac{1}{2}$ oz. 60c; 10c pkt.
- ANNUAL DELPHINIUMS.** (See Larkspur.)



Dianthus Chinensis

DIANTHUS, or Pinks

THIS elegant family contains many of the most valuable and popular flowers in cultivation. All the sorts classed as annuals may be sown directly in the garden as soon as danger from frost is past, and will in a short time become a mass of bloom, and so remain all summer. Elegant as cut flowers for bouquets, as the stems are good. Grow about one foot high, and are of easiest culture. *Half-hardy Annual.*

Double Annual Pinks

- 194—**Chinensis Fl. Pl.** (China Pinks) Large double, fragrant flowers. Mixed colors. $\frac{1}{2}$ oz. 10c pkt.
- 195—**Heddewigi Nobilis.** (Royal Pinks.) The flowers are very large and the petals are fringed and fringed. The colors are of a deep yet very bright blood-red, then shade to carmine and pink and even white. $\frac{1}{2}$ oz. 10c pkt.

Hardy Garden Pinks

This splendid class of Pinks should be in all gardens. They have the delightful clove fragrance. *Half-hardy Perennial.*

- 196—**Allwoodii.** A perpetual-flowering hardy garden Pink—the seed will produce an average of 75 per cent double, deliciously clove-scented flowers in many colors. They are perfectly hardy, and flower continuously from spring until late in the autumn. Splendid for cutting. $\frac{1}{2}$ oz. 25c pkt.
- 197—**Caesius.** (Cheddar Pink.) A splendid rock plant, forming dense tufts a few inches high and sweet scented bright rosy-pink flowers in May and June. $\frac{1}{2}$ oz. 50c; 10c pkt.
- 198—**Plumarius Semperflorens Fl. Pl.** (Spice Pinks) One foot high. The flowers, which are beautifully fringed, are much larger and more double than the old varieties, while the colors are far richer. They emit a delightful, sweet-scented, spicy odor. Perfectly hardy, requiring only the ordinary culture of Pinks. $\frac{1}{2}$ oz. 30c; 10c pkt.

DIANTHUS BARBATUS. (See Sweet William.)

DIDISCUS (Blue Lace Flower)

- 199—**Coeruleus.** This pretty and interesting annual blooms most profusely from July till November; also used extensively for early spring flowering in a cool greenhouse; their exquisite pale lavender blossoms are excellent for cutting; plants grow about 18 inches high, and have as many as 50 flowers open at one time. $\frac{1}{2}$ oz. 50c; 10c pkt.

DIGITALIS (Foxglove)

HANDSOME and highly ornamental hardy plants of stately growth. They are now used extensively with good effect for naturalizing in shrubberies, the edge of woods and other half-shady places; 3 to 5 feet. *Hardy Biennial.* (See cut.)

- 200—**Gloxineafora, Alba.** $\frac{1}{2}$ oz. 25; 10c pkt.
- 201— " Purple. $\frac{1}{2}$ oz. 25; 10c pkt.
- 202— " Rose. $\frac{1}{2}$ oz. 25; 10c pkt.
- 203— " Finest Mixed $\frac{1}{2}$ oz. 20; 10c pkt.

DIMORPHOTHECA (African Golden Daisy)

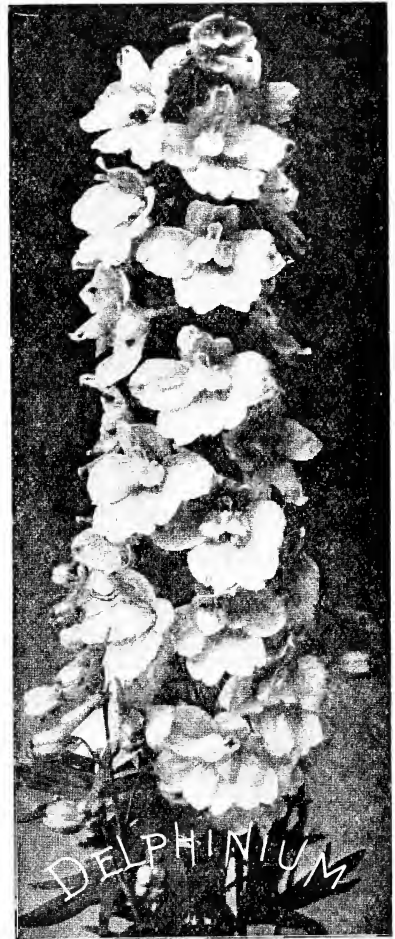
Hardy annual from Africa, invaluable for bedding in sunny situations. Desirable for cut flowers. Early sown seed will produce plant to bloom all summer. 12 to 15 in.

- 204—**Aurantiaca.** Flowers glossy, rich orange gold with dark center, surrounded by black zone. $\frac{1}{2}$ oz. 10c pkt.
- 205—**Aurantiaca Hybrids.** Similar in habit to the parent. The flowers range in color from purest white through yellow and orange to rich salmon, being zoned with same color around the center. $\frac{1}{2}$ oz. 15c pkt.

DOLICHOS (Hyacinth Bean)

A RAPID-GROWING annual climber, flowering freely in erect racemes, followed by ornamental seedpods; for covering arbors, trellises, etc. *Tender Annuals.*

- 206—**Finest Mixed.** Purple and white. $\frac{1}{2}$ oz. 15c; 10c pkt.



DRACENA (Dragon Plant)

- 207—Indivisa.** Beautiful ornamental leaved plants; long, narrow, green foliage; indispensable as centre plants for vases and for house decorations. $\frac{1}{4}$ oz., 25c; 10c pkt.

ESCHSCHOLTZIA

(California Poppy. Gold Cups)

A SHOWY, free-flowering plant of low-spreading growth, with finely divided foliage, blooming throughout the season. Seed should be sown thinly in shallow drills early in spring. *Hardy Annual.* (See cut.)

- 208—Carmine King.** A beautiful carmine-rose color, as intense on the inside as on the outside of the petals, which gives it an altogether novel and beautiful effect.Oz., 50c; 10c pkt.
- 209—Golden West.** The flowers measure from 3 to 6 inches in diameter; they have large, overlapping petals, often daintily waved at the edges. Color, light canary-yellow, with an orange blotch at the base of the petals.Oz., 30c; 10c pkt.
- 210—Hybrida Grandiflora.** New large flowering, erect type containing a large percentage of new shades and includes soft pink, scarlet, chrome-copper red, claret and royal purple.Oz., 50c; 10c pkt.
- 211—Mixed.** Single cup-shaped flowers in shades of bright yellow, deep orange, pink and silvery white.Oz., 30c; 10c pkt.

BUSH ESCHSCHOLTZIA. (See Hunnemannia.)



EUPHORBIA

STRONG-GROWING annuals, suitable for beds of tall-growing plants or mixed borders; the flowers are inconspicuous; but the foliage is exceedingly ornamental. *Hardy Annual.*



- 212—Variegata.** (Snow on the Mountain.) Attractive foliage, veined and margined with white; 2 feet.10c pkt.

- 213—Heterophylla.** Annual Poinsettia, Mexican Fire Plant Painted Leaf. The plant grows 2 to 3 feet high of branching, bush-like form, with smooth, glossy green leaves, which about mid-summer become a beautiful orange-scarlet, presenting a striking and brilliant appearance.10c pkt.

FEVERFEW. (See Pyrethrum and Matricaria.)

GOURDS (Ornamental)

BEING of rapid growth, they are fine to cover old fences, trellises, stumps, etc. Do not plant the seed till all danger of frost is over, and select rich, mellow ground. *Tender Annual* climbers, 10 to 20 feet.



- 214—Calabash, or Dipper.** Long, slim handle.10c pkt.
- 215—Dish Cloth.** Clusters of large, yellow flowers. The fruit, when dried, is used as a dish cloth, 10c pkt.
- 216—Giant Bottle.** Large and ornamental.10c pkt.
- 217—Hercules Club.** A curious sort, club-shaped.10c pkt.
- 218—Japanese Nest Egg.** White, facsimile of an egg; not injured by heat or cold.10c pkt.
- 219—Orange.** The well-known mock orange.10c pkt.
- 220—Pear-Shaped.** Green and white striped.10c pkt.
- 221—Sugar Trough.** Used for buckets. Very large.10c pkt.
- 222—Mixed Varieties.** $\frac{1}{4}$ oz., 25c; 10c pkt. All varieties. $\frac{1}{4}$ oz. 30c

EVERLASTING, ETERNAL or STRAW FLOWERS. (See Acroclium, Ammobium, Gomphrena, Helichrysum, and Xeranthemum.)

- FLAX, Scarlet.** (See Linum.)
- FORGET-ME-NOT.** (See Myosotis.)
- FOUR-O'CLOCKS.** (See Marvel of Peru.)
- FOXGLOVE.** (See Digitalis.)

GOMPHRENA (Globe Amaranth)

- 223—A desirable everlasting, valuable for its handsome globular heads of flowers. Half-hardy Annual. Mixed.10c pkt.**

GAILLARDIA (Blanket Flower)

ANNUAL VARIETIES

Splendid, showy annuals; in bloom from early summer till November; excellent for beds, borders or for cutting. *Half-hardy Annual.*

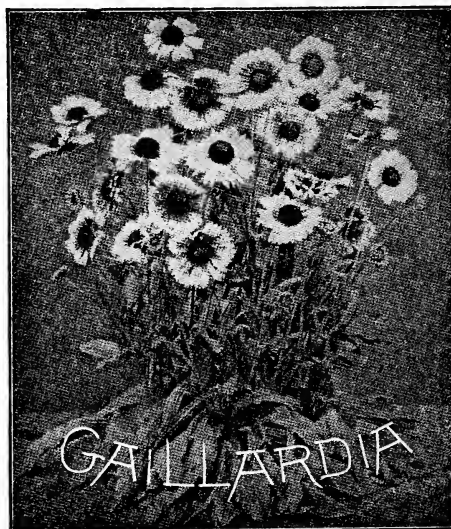
- 224—Picta Lorenziana.** Double-flowering mixed.10c pkt.

HARDY PERENNIAL VARIETY

Thrives in almost any position or soil and requires little or no protection. If sown early, begins flowering in July, continuing a mass of bloom until frost, fine for cutting. *Hardy Perennial.* (See cut.)

- 225—Grandiflora.** A compact variety, forming bushy plants 12 to 15 inches high, and bearing its long-stemmed flowers well above the foliage.10c pkt.

- 226—Portola Hybrids.** The immense flowers are a brilliant rich coppery scarlet each petal being tipped with golden yellow; the plants are of an upright habit and the flowers are held erect on long stiff stems; excellent for cutting.15c pkt.



GRASSES (Ornamental)

FOR large beds or groups on lawns nothing gives a finer effect, and they are now largely used in prominent positions in many of the finest public parks, etc. When carefully dried they are useful in making up winter bouquets. Cut when in full bloom, and before the flowers get too old; tie in small bunches and hang up in a dry, dark place, with the heads downward.

- 227—*Bromus Brizaeformis*. A graceful variety with drooping panicles, flowering the first season. *Hardy Perennial*; 1 foot.....10c pkt.
- 228—*Coix Lachrymae*. (Job's Tears.) Broad, corn-like leaves, and hard, shining, pearly seeds resembling tears. *Hardy Annual*; 2 feet.....Oz. 15c; 10c pkt.
- 229—*Erianthus Ravennae*. A noble grass with exquisite white plumes; flowers the first season if sown very early. *Hardy Perennial*; 10 feet.....10c pkt.
- 230—*Eulalia Japonica*. One of the most beautiful of the tall-growing grasses. *Hardy Perennial*; 5 feet....10c pkt.
- 231—*Gynerium Argenteum*. (Pampas Grass.) The finest ornamental grass in cultivation. *Half-hardy Perennial*; 10 feet.....10c pkt.
- 232—*Pennisetum Ruppelianum*. Beautiful and graceful spikes of purple; this is one of the best. *Hardy Annual*; 2 ½ feet.....10c pkt.
- 233—*Finest Mixed*. Used for making winter bouquets. 10c pkt.

GYPSOPHILA (Baby's Breath)

PRETTY free-flowering plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers.

- 234—*Elegans Grandiflora Alba*. This is an improved large-flowering pure white form of the annual Baby's Breath. *Half-hardy Annual*.....Oz. 30c; 10 pkt.
- 235—*Elegans Carminea*. Bright carmine-rose. Oz. 40c; 10c pkt.
- 236—*Paniculata*. White flowers, fine for bouquets; blooms first year if sown early. *Hardy Perennial*; 2 feet. ½ oz. 35c; oz. 60c; 10c pkt.
- 237—*Paniculata Flore Plena*. A great improvement on the single flowered type and more lasting; the flowers forming miniature balls of white petals. Not quite fixed but about 25 per cent comes true.....15c pkt.
- 238—*Repens*. A pretty dwarf trailing species for the rockery. It has pinkish white flowers, and is a continuous bloomer. *Hardy Perennial*.....½ oz. 60c; 15c pkt.

GREVILLEA (Silk Oak)

- A BEAUTIFUL and graceful decorative plant with fern-like foliage; excellent for table decoration; easily raised from seed; producing a good sized plant in a short time.
- 239—*Robusta*. Orange colored flowers.....10c pkt.



MALLOW MARVELS

HELICHRYSUM (Straw Flower)

- 240—*Monstrosum*. Everlasting flowers, large and full. Colors, white, yellow and red. Cut before the flowers fully expand. *Hardy Annual*. Mixed.....¼ oz. 25c; 10c pkt.
- 241—*Monstrosum, Silvery Pink*. A delicate shade of silvery pink. The delicate color is new and heretofore unknown in Helichrysms. Blooms are large slightly over two inches in diameter, a good commercial variety. 15c pkt.

HELIOTROPE (Cherry Pie)

- A HALF-HARDY *Perennial*, flowering during the whole season; its delightful perfume makes it a most desirable bouquet flower; a splendid bedding plant, or can be trained as a greenhouse climber. Seed started indoors in the spring will make fine plants for summer blooming.
- 242—*Choicest Mixed*; from new varieties.....10c pkt.

HESPERIS MATRONALIS

(Sweet Rocket)

- Bears spikes of showy white, lilac and purple fragrant flowers. Fine for naturalizing or for planting in a permanent border. *Hardy Perennial*. 2 to 3 feet.
- 243—*Mixed Colors*.....¼ oz. 25c; 10c pkt.

HIBISCUS (Marshmallow)

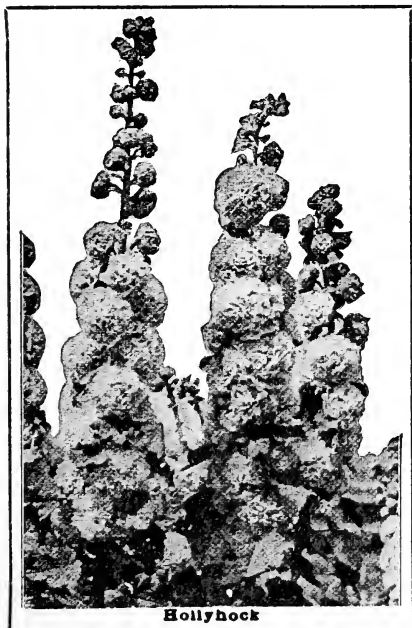
- SHOWY ornamental perennial plants, for mixed beds or shrubbery borders; blooms first year if sown early.
- 244—*Mallow Marvels*. Immense flowers 8 to 10 inches in diameter, in the following colors; fiery crimson, blood red, shell pink and white. Their great beauty surpasses all other perennials in profusion of bloom and brilliancy of color. They come up year after year and are absolutely hardy. *Hardy Perennial*.....¼ oz. 35c; 10c pkt.

HOLLYHOCK

- ONE of the most majestic of hardy plants, and a clump or line in any garden gives an effect not attainable with any other plant. For planting among shrubbery or forming a background for other flowers it is without an equal. Seed sown any time before mid-summer will produce fine plants for flowering next year. To get results this season it is necessary to get year-old plants. These we offer with other hardy plants under their proper heads. *Hardy Perennial*.
- 245—*Chater's Double Pink*.....10c pkt.
- 246—*Chater's Double Rose*.....10c pkt.
- 247—*Chater's Double Scarlet*.....10c pkt.
- 248—*Chater's Double White*.....10c pkt.
- 249—*Chater's Double Yellow*.....10c pkt.
- 250—*Chater's Prize, Double Mixed*. This strain stands unrivaled in richness and delicacy of coloring, with magnificent spikes of very double flowers. (See cut.).....10c pkt.
- 251—*Mammoth Fringed Allegheny*. Mammoth flowers of loosely arranged fringed petals. The colors vary from the palest shrimp pink to deep red. The plants are of strong growth, sending up spikes 6 to 7 feet high.....10c pkt.
- 252—*Single*. Many prefer the single flowering. They are usually of freer growth and present a handsome appearance when covered with their artistic blossoms. Finest mixed; all colors.....10c pkt.

HONESTY (Moonwort, Satin Flower)

- 253—Greatly admired for its silvery seed pouches, which are used for house ornaments; two feet. *Hardy Biennial*.....10c pkt.



Hollyhock

All 10c Packets of Flower Seeds are 3 Packets for 25c. 13 Packets for \$1.00.

HUMULUS (Japanese Hop)

- 254—*Japonicus*. A very ornamental and fast-growing climbing plant. The foliage resembles that of the common Hop, is very dense, and in color a lively green. *Hardy Annual*. $\frac{1}{4}$ oz., 20c; 10c pkt.
- 255—*Variegatus*. A variegated variety of the Hop. The leaves are beautifully marbled and splashed with silvery-white, light and dark green; very effective for screens, arbors, trellises, etc. *Hardy Annual*. $\frac{1}{4}$ oz., 20c; 10c pkt.

HUNNEMANNIA

(Giant Yellow Tulip Poppy, or Bush Eschscholtzia)

- 256—*Fumariaefolia*. This is by far the best of the poppy family for cutting, remaining in good condition for several days. Seed sown early in May will, by the middle of July, produce plants covered with their large buttercup-yellow, poppy-like blossoms, and never out of flower until hard frost. The plants grow about 2 feet high, are quite bushy, with beautiful feathery glaucous foliage. *Half-hardy Annual*. $\frac{1}{4}$ oz., 20c; 10c pkt.

HYACINTH BEAN. (See *Dolichos*.)**IBERIS (Hardy Candytuft)**

- 257—*Sempervirens*. A profuse white-blooming plant, coming in flower early in the spring; much used for cemeteries, rockeries, etc.; 1 foot. *Hardy Perennial*. 10c pkt.

ICE PLANT

- 258—*Mesembryanthemum Crystallinum*. Handsome and curious plants for hanging baskets, rock-work, vases and edgings. The leaves and stems are covered with crystalline globules, giving it the appearance of being covered with ice. Succeeds best in a sandy soil and warm situation. *Tender Annual*. 10c pkt.

IPOMEA. (See Cypress Vine, Moonflower and Morning-Glory.)**IMPATIENS (Sultan's or Zanzibar Balsam)****CHARMING** plants producing bright, waxy-looking flowers profusely and almost continuously. *Tender Perennial*.

- 259—*Sultana Hybrids*. Beautiful hybrids. Varying shades of color, from delicate pink to the deepest red. 15c pkt.

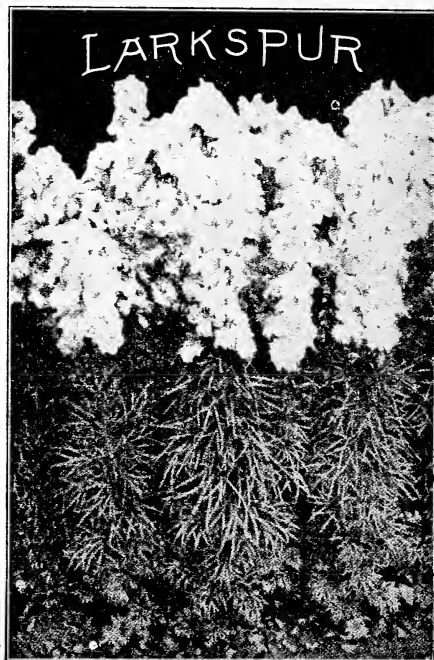
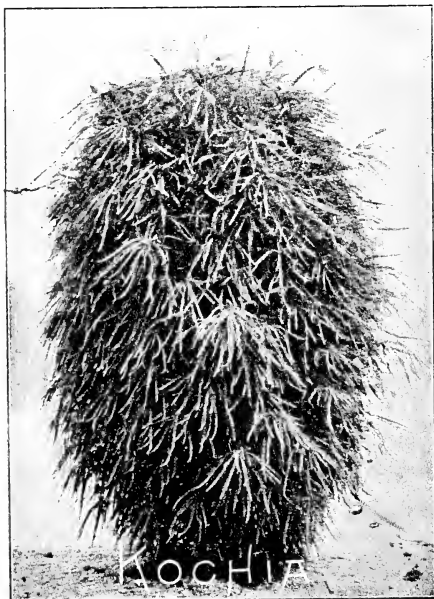
"JACK AND THE BEAN STALK." (See Kudzu Vine Seed.)**JOB'S TEARS.** (See Ornamental Grasses.)**KUDZU VINE**

- 260—*Pueraria Thunbergiana*. It will grow 8 to 10 feet the first year from seed, and after becoming established will produce vines 50 feet high in a season, sometimes growing 12 inches in a single day. Produces a tuberous root which is perfectly hardy. Unequaled for porches, arbors, trellises, etc. *Hardy Perennial*. 10c pkt.

KOCHIA

(Summer Cypress, Belvedere or Burning Bush)

FORMS regular pyramids about 3 feet high, having a cypress-like appearance. The leaves are light green until September, when they change to carmine and blood red. Sow indoors in April and plant out in May, or sow in open ground about May 1st. *Hardy Annual*. (See cut.)



- 261—*Kochia Childsii*. This new variety produces plants that grow three to four feet high, dense, strong and symmetrical. The foliage is green all summer, but at touch of frost it changes to dark claret-red and does not die until Christmas or later. A splendid plant to divide the vegetable from the flower garden or for forming a summer hedge for any purpose. Also desirable as a pot plant. 10c pkt.

LANTANA

- 262—Verbena-like heads of orange, white, rose and other colored flowers; constantly in bloom; 2 to 3 feet. *Half-hardy Perennial*. Mixed colors. 10c pkt.

LAVENDER (Lavandula Vera)

- 263—Well known, sweet-scented. *Hardy Perennial*; should be extensively grown in the mixed border; 2 feet. 10c pkt.

LARKSPURS, Annual

THIS is one of the best known of garden flowers. Seeds sown in the open ground before the close of April will produce flowering plants by the beginning of July, and give a continuous succession of flowers from then until frost. *Hardy Annual*.

Double Stock-Flowered. The finest variety with splendid spikes of beautiful double flowers; $2\frac{1}{4}$ to 3 feet.

- 264—*Exquisite Pink*. An improved strain of Double Stock Flowered Larkspur, true exquisite pink color with wonderful new form, upright habit similar to the perennial Delphinium, comes practically true from seed. $\frac{1}{4}$ oz. 50c; 15c pkt.

- 265—*Exquisite Rose*. A beautiful shade of Rose Pink color that makes a charming and effective bunch when cut and equally effective in the garden. $\frac{1}{4}$ oz. 50c; 15c pkt.

- 266—*Dark Blue*. 10c pkt. 268—*Scarlet*. 10c pkt.

- 267—*Light Blue*. 10c pkt. 269—*White*. $\frac{1}{4}$ oz. 20c; 10c pkt.

Collection: One packet each of the above six varieties, 50c.

- 270—*Finest Mixed*. $\frac{1}{4}$ oz., 15c; oz., 50c; 10c pkt.

(For Hardy Perennial Larkspurs see Delphinium)

(LADY SLIPPER. See Balsam.)

LATHYRUS (Everlasting, or Hardy Sweet Pea)

Showy, free-flowering climbers for covering old stumps, fences, etc., continually in bloom; fine for cutting. *Hardy Perennial*.

- 271—*Latifolius*—*White Pearl*. The finest white variety. 10c pkt

- 272— " *Pink Beauty*. Rosy pink. 10c pkt

- 273— " *Mixed*. All colors. $\frac{1}{4}$ oz., 15c; oz., 40c; 10c pkt.

LILIUM REGALE

- 274—Regal Lily.** It is hardy, and is excellent for forcing. The flowers white, slightly suffused with pink, with a beautiful shade of canary-yellow at the center, and extending part way up the trumpet. Blooms out-of-doors early in July, and seedling bulbs will flower the second year. Lift the bulbets in fall and replant to greater depth in their permanent location. $\frac{1}{2}$ oz., 90c; 25c pkt.

LINARIA

- 275—Cymbalaria.** (Kenilworth Ivy). A pretty creeping rock plant with good foliage and small lilac-blue flowers. Also a good trailing plant for wall gardens. 15c pkt.
- 276—Macedonica Speciosa.** (Perennial). Easily grown from seed, and is undoubtedly the best yellow perennial that can be grown for general use. It is hardy and can be used where medium height is needed in rock garden work. The flowers resemble large golden yellow snapdragons, borne on stems averaging three feet. 15c pkt.
- 277—Maroccana Hybrida.** A hardy annual with small dainty flowers resembling miniature Antirrhinums and in addition each flower has a long Columbine-like spur. It makes a nice cut flower. Height from twelve to eighteen inches. Blooms in about eight weeks from seed. 10c pkt.

LINUM (Flax)

- 278—Grandiflorum Rubrum.** (Scarlet Flax). One of the most effective and showy bedding plants, of long duration, having fine foliage and delicate stems, with brilliant, scarlet-crimson flowers. Hardy Annual; 1 foot.

- 279—Perenne.** Bright blue flowers. Hardy perennial. 18 inches. Oz., 25c; 10c pkt.

LOVE IN THE MIST. (See Nigella.)

LOBELIA

THE following choice varieties of this popular and beautiful flowering plant will be found most desirable for pot culture, edgings, hanging baskets, etc., blooming profusely from June to November. Half-hardy Annual.

- 280—Crystal Palace Compacta.** Rich blue; finest for bedding. 10c pkt.

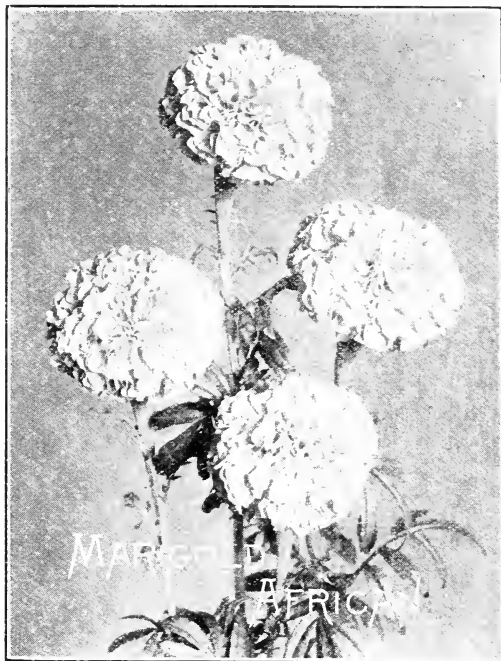
- 281—Speciosa.** Dark blue; trailing; fine for vases. 10c pkt.

LUPINUS (Lupine)

- 282—Annual Mixed.** Free-flowering, easily grown annuals, with long, graceful spikes of rich and various colored pea-shaped flowers; 2 feet. Hardy Annual.

- 283—Polyphyllus Roseus.** A fine variety of the perennial Lupine, with showy spikes of rose-colored flowers. Hardy Perennial. Oz., 50c; 10c pkt.

- 284—Perennial Mixed.** Hardy Perennial varieties, in pink, blue and white mixed. Oz., 30c; 10c pkt.



MARIGOLD (See also Calendula)

THE African and French Marigolds are free-flowering annuals of easy culture; the former have uniformly large, yellow or orange colored flowers. (See cut.) The latter are dwarfier in growth, with beautifully striped flowers. They succeed best in a light soil, with full exposure to the sun. Half-hardy Annual.

African Varieties

- 285—Orange Prince.** Densely double flowers of a rich, deep golden orange color. $\frac{1}{4}$ oz., 25c; 10c pkt.
- 286—Lemon Queen.** Soft, lemon-yellow flowers, and forming a fine contrast to the preceding. $\frac{1}{4}$ oz., 25c; 10c pkt.
- 287—Finest Mixed African.** $\frac{1}{4}$ oz., 20c; 10c pkt.

French Varieties

- 288—Legion of Honor.** Single Dwarf Marigold, forming compact bushes. Flowers golden yellow and brown; blossoms in great profusion. $\frac{1}{4}$ oz., 25c; 10c pkt.
- 289—French Gold Striped.** Very double; 1 foot. $\frac{1}{4}$ oz., 25c; 10c pkt.

MARVEL OF PERU,

or Four O'Clock (Mirabilis Jalapa)

- 290—A well-known free-flowering garden favorite;** does well everywhere; give each plant 12 to 18 inches of room. Half-hardy Perennial. Finest mixed. Oz., 25c; 10c pkt.

MATRICARIA

- 291—Capensis Alba Plena.** (Double White Feverfew). Free-flowering plants, producing all season fine, double, white flowers. A fine bedding or pot plant. Half-hardy Perennial. 10c pkt.

MAURANDIA

Beautiful, rapid, slender growing climbers, blooming profusely until late in the autumn; also fine for the conservatory or greenhouse. A Half-hardy Perennial, flowering the first season if sown early.

- 292—Finest Mixed.** All colors. 10c pkt.

MIGNONETTE (Reseda)

- A well-known favorite. No garden is complete with a bed of Mignonette. Half-hardy Annual. (See cut.)
- 293—Defiance.** One of the finest sorts; excellent for forcing. $\frac{1}{4}$ oz., 30c; 10c pkt.
- 294—Machet.** Dwarf pyramidal growth, with very large, thick spikes, fragrant. $\frac{1}{4}$ oz., 25c; 10c pkt.
- 295—Sweet-Scented.** The old variety, but very sweetly scented. $\frac{1}{2}$ oz., 15c; 10c pkt.

MIMOSA (Sensitive, or Humble Plant)

- 296—**Pudica.** Curious and interesting annual, with pinkish-white flowers, the leaves close and droop when touched or shaken. *Half-hardy Annual*10c pkt.

MIMULUS

Fine for shady situations; blooming the first year from seed if sown early; 1 foot. *Half-hardy Perennial.*

- 297—**Tigrinus.** (Monkey Flower.) Fine mixed spotted varieties10c pkt.

MOON FLOWER (*Ipomoea Noctiflora*)

Climbers of rapid growth, with beautiful and varied flowers; for covering walls, trellises, arbors or stumps of trees.

- 298—**Cross Bred or Hybrid Moon Flower.** At night and during dull days the plants are covered with an abundance of large, pure-white, fragrant flowers, 5 to 6 inches in diameter. It is a rapid grower, and within a few months will grow as much as 40 feet. To insure germination, take a sharp knife and cut a small nick in shell of each seed, and soak in warm water for about 4 hours before planting. *Tender Perennial.*
 $\frac{1}{4}$ oz., 20c; oz., 60c; 10c pkt.

Moon Flower Plants. Each, 30c; per doz., \$3.00; by mail, each 35c.

MORNING GLORIES
or *Convolvulus*

THE Morning Glory is too well known to need a description. Succeeds under almost all circumstances. *Hardy Annual.*

- 299—**Morning Glories.** (*Convolvulus Major.*) Climbing varieties, mixedOz., 15c; 10c pkt.
 300—**Imperial Japanese or Emperor Morning Glories.** The flowers are of gigantic size and their colors range from snow-white to black-purple, with all the possible intermediate shades. $\frac{1}{2}$ oz., 15c; oz., 25c; 10c pkt.

MYOSOTIS (*Forget-Me-Not*)

The Forget-Me-Nots succeed best in shady, moist situations. *Half-hardy Perennial.*

- 301—**Alpestris Victoria.** Early flowering, of bushy habit, bearing large, bright, azure-blue flowers.10c pkt.
 302—**Palustris Semperflorens.** A dwarf Forget-Me-Not continuing in bloom from early spring until autumn; blue flowers.10c pkt.

NASTURTIUMS

FOR ease of culture, duration of bloom, brilliance of coloring and general excellence, nothing excels Nasturtiums. All they need is a moderately good soil in a well-drained sunny position. The varieties offered below were selected from a very large number of sorts as being the best and most distinct. *Half-hardy Annual.*

Dwarf, or Bedding Varieties

THEY are suitable for hanging baskets, vases, window boxes, bedding and edging; grow quickly, thrive in the poorest soil and furnish the greatest abundance of long lasting, sweet-scented cut flowers.

- 303—**McCullough's Dwarf Premier Mixed.** Will give a larger variety of colors in even proportions than any other Nasturtium mixture.

Lb., \$1.50; $\frac{1}{4}$ lb., 50c; oz., 20c; 10c pkt.

Dwarf Nasturtiums Mixed. We handle such large quantities of Dwarf Nasturtiums that we are able to offer this especially choice mixture at a very low price. See also our "Premier" mixture listed above.

Lb., \$1.00; $\frac{1}{4}$ lb., 35c; oz., 15c; 10c pkt.

Tall Varieties

These are excellent for growing in beds and borders where there is plenty of room for trailing or for light trellises and for hanging baskets, vases and window boxes. Height, usually 4 to 5 feet.

- 304—**McCullough's Tall Premier Mixed.** Contains all the kinds together with many other shades and tints of yellow, rose, scarlet, orange, carmine, violet, purple, lemon, bronze, maroon, ruby, cream and pink, both in solid colors and mottled and striped.

Lb., \$1.50; $\frac{1}{4}$ lb., 50c; oz., 20c; 10c pkt.

- 305—**Mixed Tall Nasturtiums.** For the low price, this mixture is very choice but will not give as fine flowers as our "Premier" as listed in previous column.

Lb., \$1.00; $\frac{1}{4}$ lb., 35c; oz., 15c; 10c pkt.

NEMESIA

- 306—**Dwarf Large-flowering Hybrids.** A very pretty annual, which does best in a cool position; the plants grow about a foot high, and the orchid-like flowers are very varied in color, including rose, yellow, blue, orange, etc.10c pkt.

NICOTIANA

(Sweet Scented Tobacco Plant)

ONE of the easiest annuals to raise and one of the most effective. The blossoms in shape are not unlike a Petunia blossom, but with a longer tube. The flowers open toward evening and emit a powerful perfume. *Hardy Annual.*

- 307—**Affinis Hybrids.** Large, pure white flowers of delicious fragrance. If taken up in the fall, cut back and potted, they will bloom all winter.10c pkt.

- 308—**Sanderae Hybrids.** A showy and profuse flowering, half-hardy annual, giving a continuous display of brilliant flowers through summer and autumn. The plant is of branching, bushy habit, 2 to 3 feet high, and carries the flowers in clusters. The flowers measure from 1 $\frac{1}{2}$ to 2 inches across and remain open all day. Many colors mixed10c pkt.

NIGELLA

(Love in a Mist, or Devil in the Bush)

- 309—**Miss Jekyll.** Lovely variety giving an abundance of long-stemmed flowers which are of a clear cornflower-blue, prettily set in slender elegant foliage. One of our most attractive annuals. The plants are extremely hardy, and an autumn sowing produces the best specimen for flowering in the following summer. Height, 18 inches. *Hardy Annual.*10c pkt.

- 310—**Finest Mixed.** Lovely variety giving an abundance of long-stemmed flowers, prettily set in slender elegant foliage. The plants are extremely hardy, and an autumn sowing produces the best specimens for flowering in the following summer. Height, 18 inches. *Hardy Annual.*10c pkt.

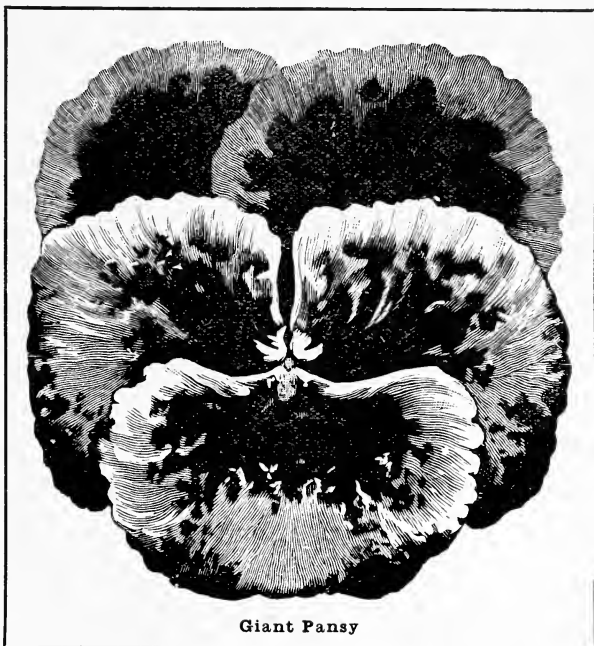


PANSY

PANSY seed has always been a leading specialty with us. Seed germinates best while soil is still cool and moist. Would advise sowing in shallow drills in seed-bed early in spring when the trees are starting out in leaf, and again in September when the weather becomes cool. Plants from the spring-sown seed flower with great freedom throughout spring, summer and fall, while the stocky young plants grown in fall and winter produce the largest and finest flowers early the following spring. Take care of the weakest looking seedlings, as they usually give the finest flowers. *Half-hardy Perennial.*

Giant Flowered Pansies

- 311—**Blue Perfection.** The best dark blue flowers of immense size. $\frac{1}{8}$ oz., 50c; 15c pkt.
 312—**Bridesmaid.** White shining rose, beautifully blotched. $\frac{1}{8}$ oz., 50c; 15c pkt.
 313—**Bugnota's Superb Blotched.** A French strain of extra large size, choicest colors, with beautiful broad blotches and delicate pencillings. Finest mixed. $\frac{1}{8}$ oz., 75c; 20c pkt.
 314—**Canary Bird.** Giant five-spotted yellow. $\frac{1}{8}$ oz., 60c; 15c pkt.
 315—**Cassier's Giant.** A very showy strain saved from large and beautifully blotched flowers. $\frac{1}{8}$ oz., 60c; 15c pkt.
 316—**Golden Queen.** Golden yellow, very fine. $\frac{1}{8}$ oz., 60c; 15c pkt.
 317—**King of Blacks.** Lustrous jet black flowers of immense size. $\frac{1}{8}$ oz., 50c; 10c pkt.
 318—**Madame Perrett.** Colors dark wine, pink and red, with edges of petals frilled and bordered white. $\frac{1}{8}$ oz., 50c; 10c pkt.
 319—**Masterpiece.** The enormous flowers are borne well above the foliage on strong stems. The petals of the flowers are waved or curled and contain the richest colors. Each petal is distinctly marked with a large dark blotch and most of the flowers are margined with a light, white or yellow edge. $\frac{1}{8}$ oz., 60c; 15c pkt.
 320—**Orchid Flowered.** Beautiful light shades, large frilled flowers. $\frac{1}{8}$ oz., 50c; 10c pkt.
 321—**Snowflake.** The finest and largest pure white flowers. $\frac{1}{8}$ oz., 50c; 10c pkt.
 322—**Triumph.** A beautiful showy class, very large frilled flowers, in a great variety of rich colors; extra fine. $\frac{1}{8}$ oz., 75c; 20c pkt.
 323—**McCullough's Premier Mixed.** The cream of American and European Specialists. In this magnificent mixture of mammoth-flowering Pansies the blossoms are borne on long stems well above the foliage and are distinguished for their gorgeous and varied colorings and beautiful markings; perfect form, and giant size, frequently measuring 3 inches in diameter. The colorings are rich and varied. $\frac{1}{8}$ oz., \$1.00; $\frac{1}{4}$ oz., \$1.75; 25c pkt.



Giant Pansy

- 324—**McCullough's Special Mixture.** A superior mixture selected from choice, large flowering strains. This strain is one of great excellence, the individual flowers being superb and include many fine shades in a number of colorings, and is intended to supply the want of a first-class mixture at a moderate price. $\frac{1}{8}$ oz., 60c; $\frac{1}{4}$ oz., \$1.00; 15c pkt.
 325—**Fine Mixed.** Great diversity of colors, free flowering blossoms are slightly smaller than the Giant sorts. $\frac{1}{8}$ oz., 25c; $\frac{1}{4}$ oz., 45c; 10c pkt.

Violas, or Tufted Pansies

(Also known as Pansy Violets, Johnny-Jump-Ups, etc.)

OUR improved strain produces beautiful Pansy-like blossoms, of most brilliant colors and markings. The plants are more hardy than Pansies, and of vigorous growth, forming deep-rooting, compact, tufted clumps. Planted in masses or lines they form perfect mats covered with myriads of flowers from spring until cold weather.

- 326—**McCullough's Special Mixture.** $\frac{1}{8}$ oz., 50c; 10c pkt.

PENTSTEMON (Beard Tongue)

A beautiful perennial plant producing freely large spikes of handsome tubular flowers in almost every shade and color.

- 327—**Gloxinioides "Sensation".** As a bedding plant this takes rank with the Petunia, Phlox, etc. It grows about 30 inches high, every branch being a spike of large, Gloxinia-like flowers in a very wide range of bright colors, including rose, red, carmine, cherry, pink, lilac, purple, etc. 15c pkt.

PETUNIA

For outdoor decoration or house culture few plants equal the Petunia in effectiveness. Easily cultivated, only requiring a good soil and sunny position. *Hardy Annual.*

Double Large-Flowering

IT IS well known that seed saved from the most carefully hybridized flowers produces but a small percentage of double flowers, the balance being singles of unusually fine quality. The weaker seedlings should be carefully saved, as these invariably produce the finest double flowers.

- 328—**McCullough's Double Fringed.** One of the finest strains in existence. The double flowers are very large, full and beautifully formed, with the edges of the petals elegantly fringed. 35c pkt.
 329—**Large Double Mixed.** Choice strains of fine colors and large flowers. 25c pkt.



McCullough's Mammoth Petunias

PETUNIA—Continued

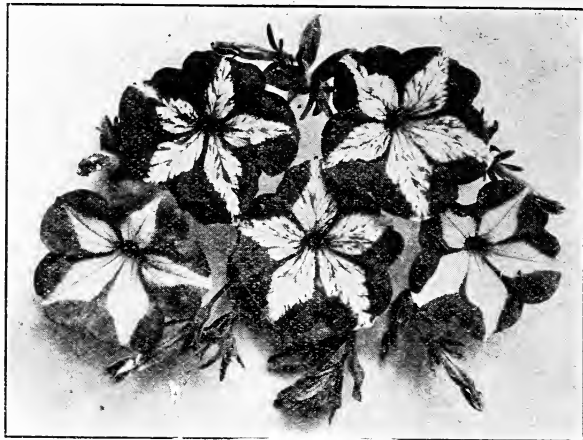
Single Large-Flowering

THE weaker seedlings produce the finest flowers of best colorings. It is best to sow large-flowering Petunias indoors and transplant to the open in May. Single Bedding kinds can be sown right out of doors in May.

- 330—**McCullough's Mammoth Single.** This mixture is made by ourselves and includes, besides the Ruffled and California Giants, all the colors of the large-flowering and fringed sorts, and the unsurpassed *Superbissima* varieties with their delicately veined throats in various colors and their truly mammoth flowers. 3 pkts., 50c; 20c pkt.
- 331—**Ruffled Giants.** Very large flowered; ruffled, fluted and fringed, striped and mottled, blotched and solid self-colors. 2 pkt., 25c; 15c pkt.
- 332—**Large Flowering Single, Finest Mixed.** Superb strain from show flowers; very large and of great substance. 2 pkts., 25c; 15c pkt.

Single Bedding Petunias

- 333—**Alba.** Pure white. 1/8 oz., 25c; 10c pkt.
- 334—**Carmen Sylva.** Baby blue with white throat. 1/8 oz., 40c; 10c pkt.
- 335—**Howard's Star.** A beautiful free-flowering strain, crimson-maroon with a clearly defined five-pointed star of blush white. 1/8 oz., 40c; 10c pkt.
- 336—**Rosy Morn.** Carmine-pink with white throat. 10c pkt.
- 337—**Rose of Heaven.** Dwarf; rose pink. 10c pkt.
- 333—**Dwarf Inimitable.** A compact growing variety; flowers cherry-red with a white center. 1/8 oz., 30c; 10c pkt.
- 339—**Striped and Blotched.** Fine for massing. 1/8 oz., 25c; 10c pkt.
- Finest Mixed. Superb strain. 1/8 oz., 40c; 10c pkt.
- Fine Mixed. All colors. 1/8 oz., 25c; 10c pkt.



Howard's Star Petunia

Balcony Petunias

A splendid free-flowering type, for bedding, window boxes, vases, hanging baskets, etc.

- 340—**Balcony Blue.** Rich velvety violet. 1/8 oz., 50c; 15c pkt.
- 341—**Balcony Purpurea.** Dark red. 1/8 oz., 50c; 15c pkt.
- 342—**Balcony Rose.** Brilliant rose-pink, very effective. 1/8 oz., 50c; 15c pkt.
- 343—**Balcony White.** Pure white flowers, large and borne abundantly until frost. 1/8 oz., 50c; 15c pkt.
- 344—**Balcony. Finest Mixed.** 1/8 oz., 50c; 15c pkt.

PHYSALIS (Chinese Lantern Plant)

- 345—**Francheti.** An ornamental plant, forming dense bushes about 2 feet high, producing freely its bright orange-scarlet lantern-like fruits, which can be cut and dried for winter bouquets; highly interesting. . . 10c pkt.

PHYSOSTEGIA (False Dragon Head)

- 346—**Virginica.** One of the prettiest hardy perennials, and gaining in popularity as it becomes better known: It forms dense bushes, 3 to 4 feet high, bearing freely during the summer months spikes of delicate pink tubular flowers not unlike a gigantic heather. . . 10c pkt.

McCULLOUGH'S Annual Phlox

FEW flowers are so easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost and care. The first sowing should be made as soon as the frost is out of the ground in spring, later ones in May, either where the plants are to bloom or in a seed-bed, as the Phlox transplants readily. (See cut.)

Phlox Drummondii Grandiflora

- 347—**Alba,** pure white. 1/8 oz., 50c; 10c pkt.
- 348—**Deep Rose.** 1/8 oz., 50c; 10c pkt.
- 349—**Scarlet.** 1/8 oz., 50c; 10c pkt.
- 350—**Finest Mixed.** Is a special mixture of Phlox; has very large, perfectly round flowers, and will produce immense trusses of flowers which will surpass every other variety in richness of color and duration of bloom. It grows very compact. To prolong blooming, the seed pods should be removed as soon as they form. 1/8 oz., 25c; 1/4 oz., 40c; 10c pkt.

Phlox, Large-Flowering Dwarf

A type combining the size of the individual flower and head of the *Grandifloras*, but of dwarf, compact growth.

- 351—**Fireball.** Fiery scarlet. 1/8 oz., 50c; 15c pkt.
- 352—**Snowball.** Pure white. 1/8 oz., 50c; 15c pkt.
- 353—**Finest Mixed Colors (Dwarf Varieties).** 1/8 oz., 30c; 10c pkt.

Hardy Perennial Phlox (P. Decussata)

Hardy Herbaceous Perennial and quite distinct from the varieties of Phlox Drummondii, which are annuals. For best results, should be sown as soon as frost is out of the ground in spring or as soon as gathered in the autumn.

- 354—**Mixed.** All varieties. 10c pkt.



See McCullough's Collection of
"Easy to Grow" Flower Seeds. It
 may save you money.
 Illustrated on page 100.

for
 Better
 Flowers

feed them this complete,
 balanced diet

VIGORO
 Complete plant food



POPPIES

Double Annual Poppies

THEY make a gorgeous show during their flowering period, and are largely used for beds and borders. Should be sown as early in the spring as possible where they are to remain, as they do not stand transplanting. Sow very thinly. *Hardy Annual.*

- 355—Double Shirley.** A very pretty strain with double flowers in the same wonderful range of colors as the single Shirley; 30 inches. $\frac{1}{4}$ oz., 20c; 10c pkt.
- 356—Finest Mixed.** This includes all the choicest sorts and will produce charming flowers in an endless variety of colors. $\frac{1}{4}$ oz., 15c; oz., 25c; 10c pkt.

Single Annual Poppies

ANNUAL Poppies should be sown as early in the spring as possible where they are to remain, as they do not stand transplanting. Sow very thinly. If they come up too thickly they must be thinned out to stand 3 to 4 inches or more apart if you wish best results. *Hardy Annual.*

- 357—American Legion.** A greatly improved English Scarlet or Flanders Poppy, with very large flowers of dazzling orange scarlet; 2 ft. 10c pkt.
- 358—Shirley Wild-Rose Pink.** This beautiful variety is a selection out of the Shirley Poppy; in color a uniform bright but soft Wild Rose pink, a color that appeals to everyone and which makes a charming bed, and of special value for cutting; 2 feet. $\frac{1}{4}$ oz., 30c; 10c pkt.
- 359—Shirley Finest Mixed.** They are single and occasionally semi-double, and range in color from the purest white through the delicate shades of pale pink, rose and carmine to the deepest crimson and blood-red, while many are daintily edged and striped. In fact, so varied are they that scarcely any two flowers are exactly alike. (See cut.)
..... $\frac{1}{4}$ oz., 15c; oz., 40c; 10c pkt.
- 360—Tulip.** One of the most brilliant of poppies, bearing bright scarlet tulip shaped flowers with a dark spot at the base of each petal. It makes a gorgeous display in masses.
..... $\frac{1}{4}$ oz., 25c; 10c pkt.
- 361—Finest Mixed.** This mixture includes all the choicest Poppies and is really extra choice.
..... $\frac{1}{4}$ oz., 15c; oz., 25c; 10c pkt.

Hardy Perennial Poppies

ORIENTAL Poppies should be sown in early spring in the open ground as soon as it is fit to work. The plants disappear during July and August, appearing again as soon as the weather gets cool. When this fall growth starts is the time they should be transplanted to their permanent flowering quarters. It is well to mark the places they are planted with a stake to insure the roots against disturbances during their annual resting period.

- 362—Orientale.** (The large Oriental Poppy.) A charming summer-flowering hardy plant, producing numerous leafy stems about 2 $\frac{1}{2}$ feet high, with large, deep crimson flowers, having a conspicuous black blotch on each petal; exceedingly showy. $\frac{1}{4}$ oz., 40c; 10c pkt.
- 363—Oriental Hybrids.** Contains the preceding and many more beautiful hybrids of the Oriental Poppy, producing flowers of immense size, 6 inches and over in diameter, and of many novel colors. $\frac{1}{4}$ oz., 50c; 10c pkt.



Iceland Poppies (*Papaver Nudicaule*)

WHILE these are hardy perennials, they flower the first year from seed, blooming almost as quickly as the annual sorts. They are of graceful, neat habit, with bright green, fern-like foliage, formed in tufts from which issue slender stalks about 12 inches high, bearing their brilliant flowers in endless profusion; most useful for cutting, for which purpose pick when in bud, for if the seed pods are picked off, they continue in flower the entire season. They remain evergreen throughout the winter, coming into bloom early the following spring. *Hardy Perennial.*

- 364—Finest Mixed.** All colors. $\frac{1}{4}$ oz., 25c; 10c pkt.

PORTULACA (Sun Plant or Rose Moss)

ONE of our finest *Hardy Annual* plants, of easy culture, thriving best in a light loam or sandy soil, and luxuriating in an exposed, sunny situation, the flowers are of the richest colors, and produced throughout the summer in great profusion; fine for massing in beds, edgings or rock-work; 6 inches. (See cut.)

- 365—Single Mixed Colors** Oz., 60c; 10c pkt.
- 366—Double Mixed.** A large percentage of the flowers will come perfectly double. $\frac{1}{4}$ oz., 75c; 10c pkt.

PYRETHRUM

ONE of the most valuable of our summer flowers. They flower in May and June, and frequently in August and September the second time. *Hardy Perennial.*

- 367—Hybridum Grandiflorum.** This large flowering single strain is saved from a fine collection. Bears large Daisy or Cosmos-like flowers, ranging in color from light pink to deep red, with bright yellow centers; blooms in May and June and again in the fall. One of the most graceful and long-lasting cut flowers. $\frac{1}{4}$ oz., 50c; 10c pkt.
- 368—Hybridum Fl. Pl.** Large semi-double flowers, resembling a China Aster, only more refined; extra choice selected seed; mixed colors. 25c pkt.
- 369—Pyrethrum Aureum.** It is the well-known Golden Feather used for edging, carpet-bedding, etc. 10c pkt.

PRIMULA

THE beautiful Chinese Fringed Primroses and Obconica and Forbesi varieties are indispensable for winter or spring decorations in the home or conservatory. They are among the most important winter blooming pot plants. The seed we offer has been saved from the best strains of English and Continental growth. Sow in March, April or May. The hardy varieties are also deserving of wide cultivation.

Primula Chinensis Fimbriata FRINGED CHINESE PRIMROSE

The seed should be sown in light soil, but for final potting a richer soil is necessary, consisting of two parts loam to one each of well decayed manure or Vigoro. *Greenhouse Perennial*.

- 370—**Alba Magnifica**. The finest pure white with bright yellow eye, beautifully fringed. 20c pkt.
371—**Crimson King**. Large brilliant scarlet, finely fringed. 20c pkt.
372—**Coerulea**. Fine blue; excellent. 20c pkt.
373—**Rose Queen**. Delicate rose, finely fringed. 20c pkt.
374—**McCullough's Finest Mixed**. This mixture contains nothing but the finest sorts of Chinese Primroses. (See cut.) 20c pkt.

Primula Obconica

THESE are of the easiest culture in greenhouse or light window of dwelling house, flowering abundantly and continuously with little care, and should be sown during the spring in good, porous loam. They will not germinate well in any compost containing peat or leaf-mould. To develop the colors to the highest degree, grow in heavy soil, and at a temperature as near 60 degrees as possible. The Grandiflora varieties are the freest flowering, but lack the very large individual blooms of the newer Gigantea type. *Greenhouse Perennial*.

- 375—**Primula Obconica Grandiflora**. Very large flowers with nicely fringed and toothed petals. The flowers are produced in constant succession, ranging in color from white and red to rose. 10c pkt.



- 376—**Primula Obconica Gigantea**. This new variety is the finest yet introduced; of strong, vigorous growth with immense heads of large individual blooms. Varies in color from pale lilac to rose, white and red. 15c pkt.

Hardy Primroses

These are among the best of the early spring-blooming plants. *Half-hardy Perennial*.

- 377—**Auricula**. Finest mixed. Extra choice; saved from a prize collection. 10c pkt.
378—**Veris**. (Polyanthus.) Splendid colors; extra fine. 10c pkt.
379—**Vulgaris**. True English Primrose; canary yellow, fragrant flowers. 10c pkt.

Primula, Various Sorts

- 380—**Forbesi**. (Baby Primrose.) This is the freest-flowering Primula we know of. The little plants throw up tiny rosy-like flowers when only a few weeks old. 10c pkt.
381—**Malacoides**. A fine house plant, somewhat like P. Forbesi, but larger in all its parts, flowers delicate lilac. 15c pkt.

RICINUS (Castor Bean)

KNOWN as "Castor Oil Plant" and "Palma Christi." Highly ornamental and stately growing plants of tropical origin, with luxuriant foliage of varied colors and brilliant colored fruit. Sow as soon as the ground is warm. *Half-hardy Annual*.

- 382—**Sanguineus**. Blood-red stalks and clusters of red fruit; 8 feet. Oz., 25c; 10c pkt.
383—**Zanzibariensis**. The plants attain great dimensions, presenting a splendid aspect with their gigantic leaves. The different varieties have light and dark green leaves and some of coppery-bronze, changing to dark green, with reddish ribs. 8 to 12 feet. Oz., 25c; 10c pkt.
384—**Mixed**. All sorts. Oz., 20c; 10c pkt.

SALPIGLOSSIS (Painted Trumpet)

THE blossoms are tube shaped much like a Petunia, but rivaling the latter in the beautiful colors displayed. Seed should be sown early in spring in a hot-bed or window and transplanted when weather is settled, or directly out-of-doors after danger of frost is past. *Half-hardy Annual*.

- 385—**Finest Mixed**. This mixture is put up by ourselves from separate varieties and is without doubt the best mixture obtainable. ½ oz., 25c; 10c pkt.

SAPONARIA (Bouncing Bet)

- 386—**Ocymoides**. Very showy hardy perennial rock plant, producing during the summer months masses of small, bright rose flowers; 9 inches. ¼ oz. 30c; 10c pkt.

- 387—**Vaccaria**. A pretty and useful annual variety, grows about 2 feet high, and bears masses of satiny-pink flowers somewhat like an enlarged Gypsophila; charming for cutting, adding grace to any arrangement of flowers. Several sowings should be made to keep up a succession of bloom. Oz., 30c; 10c pkt.



RICINUS (Castor Bean) Zanzibariensis

SALVIA (Flowering Sage)

SEED should be sown as early as possible, either indoors or in a hot-bed, and the young plants transferred to their flowering quarters when the weather has become settled and warm. *Half-hardy Perennial.*

- 388—America, or Globe of Fire.** A variety of dwarf, bushy, compact growth, uniform in height and shape, and literally aglow with large spikes of brilliant scarlet flowers from early in the season until late in fall. $\frac{1}{2}$ oz., 75c; 15c pkt.
- 389—Bonfire, or Clara Bedman.** Grows in a compact bush about 2 feet high by 2 feet in diameter. Its erect spikes of flowers of brilliant scarlet stand clear above the dark-green foliage and completely cover the plant. (See cut.) $\frac{1}{2}$ oz., 50c; 10c pkt.
- 390—Farinacea.** The fine bright blue flowers are borne on long graceful stems. They are excellent for cutting. The bushes are 2 feet tall. $\frac{1}{2}$ oz., 50c; 10c pkt.
- 391—Patens.** A tender perennial variety; flowers intense bright blue, of large size; a beautiful plant for the border; can be kept as a house plant in a warm room. 20c pkt.
- 392—Splendens.** (Scarlet Sage.) One of the finest summer and fall plants with magnificent brilliant scarlet flowers. 2 feet $\frac{1}{2}$ oz., 35c; $\frac{1}{4}$ oz., 60c; 10c pkt.

SCABIOSA

(Mourning Bride, Sweet Scabious, Pincushion Flower)

The beautiful flowers in exquisite shades are borne on long stems, and when cut keep in perfect condition for the best part of a week. *Hardy Annual.*

- 393—Azure Fairy.** Lavender blue.
- 394—Crimson.** Rich, rosy crimson.
- 395—Pink.** Delicate tone of pink.
- 396—Rose.** Soft rose color.
- 397—White.** Pure white.
- Any of the above colors $\frac{1}{4}$ oz., 30c; 10c pkt.
- 398—Mixed.** All colors of the Improved Large-flowering sorts. $\frac{1}{4}$ oz., 15c; oz., 50c; 10c pkt.

Scabiosa, Hardy Perennial Varieties

- 399—Caucasica, Giant Hybrids.** A great improvement over the Caucasica, being more vigorous, with larger and longer stems and larger and heavier petals, which are ruffled and slightly frilled on the edges. In this hybrid strain you will find colors ranging from white to the darkest blue. 15c pkt.
- 400—Caucasica Finest Mixed.** (Blue Bonnet.) Especially valuable for cutting, the blooms lasting a long time in water; lilac-blue; 3 feet. *Hardy Perennial*. 10c pkt.

SCARLET RUNNER BEANS

- 401—**A great favorite in Europe, not only as an ornamental climber, but for the delicious, edible pods which succeed the bright scarlet, pea-shaped blossoms.

1 oz. 15c; 10c pkt.

SENSITIVE PLANT. (See Mimosa.)

SHASTA DAISY. (See Hardy Chrysanthemum.)



Salvia—"Bonfire"

SCHIZANTHUS (Poor Man's Orchid, or Butterfly Flower)

THIS is one of the daintiest flowers, especially adapted to bordering beds of taller flowers and those of a heavier growth. The seeds germinate quickly and come into bloom in a few weeks from sowing. The florescence is such as to completely obscure the foliage, making the plants a veritable pyramid of the most delicate and charming blooms. *Half-Hardy Annual.*

- 402—Mixed.** A splendid mixture. Neat pyramidal bushes covered with a multitude of small butterfly-like flowers of the most brilliant and striking color designs. 10c pkt.

SEDUM COERULEUM (Stonecrop)

- 403—**A pretty creeping annual with dainty racemes of charming pale blue flowers. A splendid subject for the rockery. 25c pkt.

SMILAX (Myrsiphyllum Asparagoides)

- 404—**Smilax is the most useful climber which adorns the greenhouse or conservatory. *Tender Perennial.* $\frac{1}{4}$ oz., 25c; 10c pkt.

SOLANUM (Jerusalem Cherry)

- 405—Cleveland Red.** A greatly improved form of this very useful pot plant for winter decoration. It is of dwarf, branching habit; leaves small and oval shaped, bearing in the greatest profusion bright scarlet globular berries. Very ornamental; 1 foot. 10c pkt.

STOCKS (Gillflower)

STOCK seed may be sown in the open ground, or in the hot-bed or cold frame, but if transplanted, let this be done when the plants are small, just out of the seedleaf, or the plants become slender and never make good plants nor flower well.

- 406—McCullough's Cinnamati Market.** A fine perpetual blooming stock, producing one long, sturdy spike, closely set with enormous double flowers. A grand variety. 10c pkt.
- 407—Princess Alice.** (Cut and Come Again.) If sown early it commences blooming in June and continues until frost. It throws out numerous side branches bearing clusters of very double, pure white, fragrant blossoms and is excellent for cutting. 10c pkt.

Giant Perfection Ten Week Stock

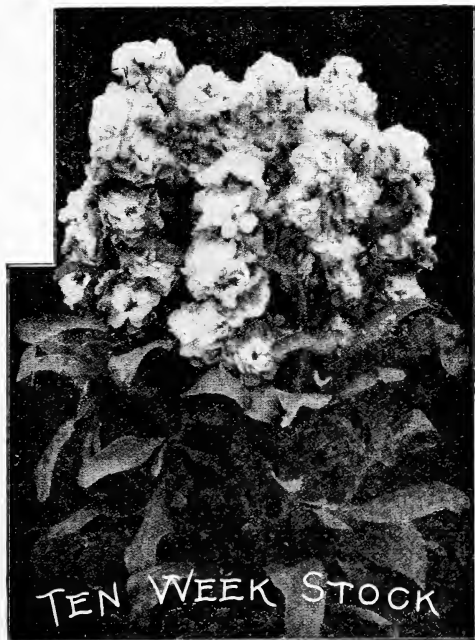
This magnificent strain is without a rival for open ground planting, attaining a height of 2½ feet. The spikes of bloom are long and the individual flowers are enormous in size and very double. *Half-hardy Annual.* (See cut.)

- 408—Finest Mixed Perfection.** All colors. 10c pkt.

Mammoth-Flowering Beauty Stock

A magnificent recently developed strain of early flowering Winter Stocks, forming many-branched plants about 2 feet high and having numerous spikes of very large, double, delightfully fragrant flowers. If sown in March will produce plants that will bloom out of doors. *Half-hardy Biennial.*

- 409—Beauty Stocks, Mixed.** 10c pkt.



TEN WEEK STOCK

STATICE (Sea Lavender)

Its cloud-like masses of flowers make borders gay for a long time, and their delicate coloring and light graceful habit make them fine for bouquets.

- 410—**Sinuata**. (True Blue). Beautiful rich navy-blue which does not readily fade. Fine annual for cut-flowers or everlasting bouquets. 1 foot..... $\frac{1}{4}$ oz., 25c; 10c pkt.
411—**Latifolia, Mixed**. Hardy Perennial with large, branching heads. Invaluable for the perennial border as well as for drying for winter decoration. 2 feet. $\frac{1}{4}$ oz., 35c; 10c pkt.

STOKESIA (Cornflower or Stokes' Aster)

PLANTS grow about 15 to 18 inches high, bearing freely from July to October handsome Centaurea-like blossoms, each measuring from 4 to 5 inches across; it is of easy culture also for cutting. Hardy Perennial.

- 412—**Cyanea**. Light blue.....10c pkt

SUNFLOWER (Helianthus)

REMARKABLE for the stately growth, size and brilliancy of their flowers, making a very good effect among shrubbery and for screens. Hardy Annual.

Double Annual Sunflowers

- 413—**Chrysanthemum-Flowered**. The plants grow 6 to feet and produce a great number of double flowers. Oz., 30c; 10c pkt.
414—**Globosus Fistulosus**. (Dahlia Sunflower.) Flowers large, double, of a rich saffron color, 6 feet. Oz., 30c; 10c pkt.
415—**Mammoth Russian**. Extra large flowers, with an abundance of seed.....Oz., 15c; $\frac{1}{4}$ lb., 25c; 10c pkt.
416—**Double Varieties, Mixed**.....Oz., 25c; 10c pkt.

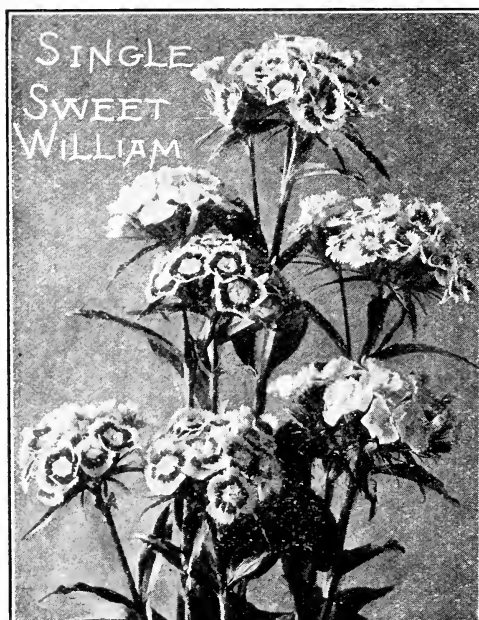
Single Annual Sunflowers

(Dwarf-Branching "Cut-and-Come-Again")

- 417—**Stella**. (Improved Miniature Sunflower.) Flowers of the purest golden yellow, with black disc. The plants form bushes 2 to 3 feet high, bearing a continuous succession of flowers from June until frost. They are easily grown, commencing to flower in a few weeks from seed. Hardy Annual.
 $\frac{1}{2}$ oz., 20c; 10c pkt.

Hardy Perennial Sunflowers

- 418—**Mixed**. Contains the finest single-flowering Hardy Perennial sorts. Seeds sown early will produce flowering plants the first year; as subjects for the hardy border as well as for cutting, they are of great value.
 $\frac{1}{4}$ oz., 65c; 10c pkt.



Stokesia. (Corn Aster)

SWEET WILLIAM
(Dianthus Barbatus)

The best varieties of Sweet William are of exceedingly beautiful colors, and the large fragrant flowers are borne in trusses of great size. They make a splendid show in the garden or hardy border and last well as cut flowers.

Seed may be sown at any time from spring to midsummer. Seed planted early will bloom in the fall. It is better to sow seed every year to have young plants, as they flower more freely. Hardy Perennial. Height, 1 $\frac{1}{2}$ to 2 feet.



- 419—**Holborn Glory**. This strain is a large-flowered selection of the auricula-eyed section, the most beautiful and admired of all Sweet Williams. The individual flowers and trusses are of extraordinary size, and the range of color, all showing a clear, white eye, is superb..... $\frac{1}{4}$ oz., 30c; 10c pkt.
420—**Newport Pink**. Beautiful light pink flowers borne in massive heads on stems 18 inches high. Very effective for cutting.
 $\frac{1}{4}$ oz., 50c; 10c pkt.
421—**Single Mixed**. A very choice assortment of all the best single-flowering varieties..... $\frac{1}{4}$ oz., 20c; 10c pkt.
422—**Double Mixed**. This mixture you will find of very superior quality; containing all colors and shades.. $\frac{1}{4}$ oz. 25c; 10c pkt.

SWEET SULTANS. (See Centaurea.)

SNOW-ON-THE-MOUNTAIN (See Euphorbia.)

SNAPDRAGON. (See Antirrhinum.)

McCULLOUGH'S SELECT SWEET PEAS

It Would be an Easy Matter for Us to Greatly Extend Our List, but We Think it Best to Confine Our Offers to Such Sorts as are Really First-Class

HOW TO GROW SWEET PEAS.—The principal essential for the best success is a cool, deep, moist soil and a sunny situation. The ground should be prepared deep and rich. Fall preparation, where possible, is preferable, but if done in the spring, use no green manure. Bone meal is good if old rotted manure can not be obtained. Sow early, as Sweet Peas need the cold, moist spring ground to make the root growth. In the latitude of Cincinnati, February is not too early. In the South, sow in the fall. Sow the seed in deep furrows, the bottom of which must be at least 6 inches below the level of the soil; this is to guard against a summer drought. Cover the seeds only one inch, after which the furrow is still five inches deep. When the plants are 2 to 3 inches high, thin out to 2 inches apart and fill in another inch or so of soil around the plants, always leaving a portion of the plant above the surface; do this at intervals until the furrow is nearly full; it should always remain a little hollow to hold the rains, and to allow water to be applied by the bucketful when necessary.

During dry weather they should be watered thoroughly and frequently and given an application of liquid manure once a week. A mulch of hay or rakings from the lawn will be found beneficial during hot weather. The flowers should be picked as often as possible, and all withered blooms should be removed, to prevent the plants from running to seed, which would stop them from blooming.

Early Flowering Spencer Varieties

NOTHING within recent years can approach in importance the introduction of the "Spencer" Sweet Peas. They are distinguished from the standard sorts by the enormous flowers with crinkled and wavy petals, and also from the fact that they usually bear four blossoms on a long stout stem.

In presenting the following varieties of Spencer Sweet Peas, we wish to emphasize the fact that these are the "Early Flowering Spencers" and are separate and distinct from the late or standard Spencer types, as they continue blooming two or three weeks longer than the standard Spencer varieties.

423—Blue Bird. A charming shade of blue. Large and exquisitely waved.

424—Burpee's Orange. The most outstanding Sweet Pea. It is a clear, pure orange self.

425—Chevalier. A true rose color, with trace of yellow towards base, well waved.

426—Columbia. The standard is bright salmon rose, the wings being pure white. Vines are strong and vigorous, bearing large well waved flowers in threes and fours.

427—Eldorado. A striking variety, with large blooms of a bright orange shade. Profuse bloomer.

428—Grenadier. The flowers are a dazzling scarlet, free flowering, with long stems.

429—Harmony. A beautiful clear lavender of vigorous growth, free bloomer.

430—Lavender King. A true, deep lavender of large size and beautifully waved.

431—Miss Louise Gude. The color of this charming variety is a shell-pink throughout. The flowers are large and well formed. Carried four on a stem of great length.

432—Mrs. Harding. The flowers are a beautiful shade of silvery blue, of exquisite texture, large, well waved, and displayed in fours on a long stem.

433—Snowstorm. The white flowers are extra large and of fine form.

434—Superior Pink. A pleasing shade of glowing pink, large beautifully waved flowers.

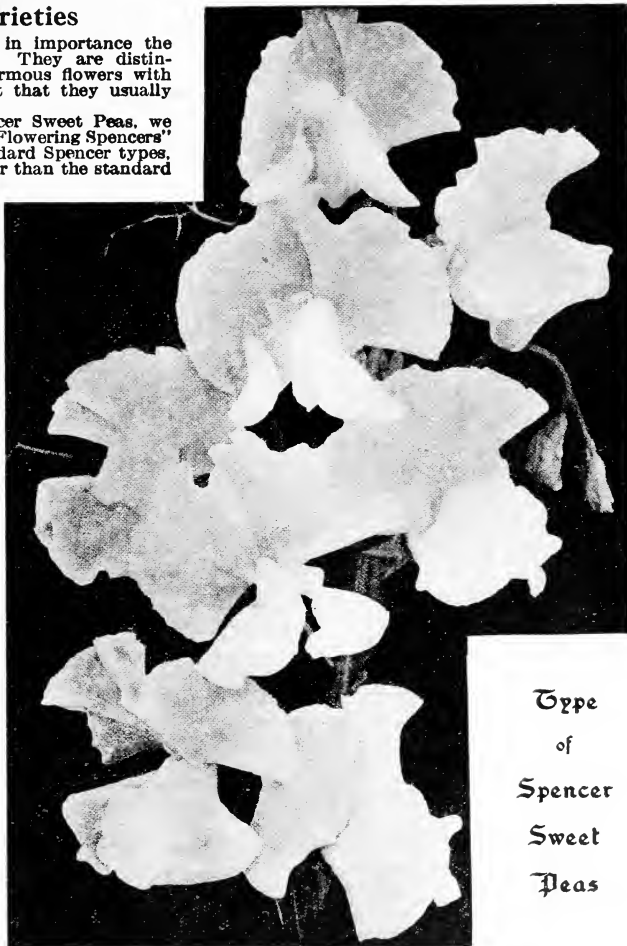
435—Yarrowa. The color on opening is rose, changing as the flower develops, to a light pink standard, tinted buff, with blush wings.

436—Zvolanek's Rose. Flowers are deep pink and large.

Price—Any of the above Early Flowering Spencer Varieties. $\frac{1}{2}$ oz., 35c; oz., 60c; 10c pkt.

COLLECTION EARLY FLOWERING "SPENCER" SWEET PEAS

One (regular size) packet of each of Twelve Early Flowering Spencer Varieties for 90c; or 6 packets for 50c, customer's selection, postpaid.



Type
of
Spencer
Sweet
Peas

437—Early Flowering Spencers, Mixed. A carefully composed mixture of the finest standard named varieties, colors properly blended.

$\frac{1}{2}$ oz., 25c; oz., 40c; 10c pkt.

See McCullough's Collection of
"Easy to Grow" Flower Seeds. They
may save you money.
Illustrated on page 100

Spencer Varieties

438—Dobbies Cream. Deep cream or primrose colored, nicely waved, with an abundance of four-bloom sprays.

439—Fiery Cross. Color a scorching fire-red, or scarlet. It does not scorch or burn and the beautifully waved and fluted flowers are borne freely in threes and fours, on long stems.

440—Hercules. A magnificent soft rose-pink. The broad and beautifully waved standards frequently measure two and one-half inches in diameter. Oz., 30c; 10c pkt.

441—Jean Ireland. Flowers creamy buff, standards margined carmine-rose.

(Spencer Varieties continued to next page.)

McCULLOUGH'S SELECT SWEET PEAS

SPENCER VARIETIES—Continued

- 442—**King White.** The grandest of all White Sweet Peas and of the most up-to-date Spencer form. It is the largest of White Spencers and the buds are of unusual size before opening. The stems are long, stout and bear practically always four blossoms.
- 443—**Margaret Atlee.** The flowers are a rich glowing pink on cream ground, suffused with salmon in the standard, while the wings are pinkish-rose and salmon. The flowers are exquisitely waved, and freely produced in fours on long stout stems.
- 444—**Margaret Madison.** The flowers are azure blue, slightly tinted with mauve, of good size, both standard and wings being delightfully waved and frilled.
- 445—**Mrs. Cuthbertson.** The standard is a clear, rose-pink in color, wings white, slightly flushed light rose.
- 446—**E. F. Felton.** The color is a soft, pleasing shade of lavender, suffused rose; wings French gray, flowers large and waved.
- 447—**Rosabelle.** A fine rose-colored flower, and a strong grower.
- 448—**Royal Purple.** A rich royal purple, a distinct color and large size.
- 449—**The President.** Flowers are scarlet, of largest size, carried on strong, stiff stems, usually in fours, always beautifully waved.

Price: Any one of the above Spencer varieties,
oz., 35c; 10c pkt.

COLLECTION "SPENCER" SWEET PEAS

One (regular size) packet of each of the Twelve
Spencer Varieties for 90c, or 6 packets for
50c customer's selection, postpaid.

- 450—**McCullough's Special Mixture Spencer Varieties.** This mixture is made up by ourselves from the cream of this class in all possible color variations, and we are confident many surprises will result, as we have included in this not only the above sorts, but many others which are new and striking in this class.

1 lb., \$1.50; $\frac{1}{4}$ lb., 50c; oz., 15c; 10c pkt.

- 451—**McCullough's Premier Mixed Grandiflora Sweet Peas.** This mixture contains all the best-named large-flowering varieties and novelties and is undoubtedly a truly superb mixture blended by us with extraordinary care from named varieties of the most approved large-flowering type including recent American and European varieties, as well as a great many Spencer and Unwin sorts and other hybrids insuring a gorgeous color effect.

1 lb., \$1.00; $\frac{1}{4}$ lb., 30c; oz., 15c; 10c pkt.

THUNBERGIA (Black-Eyed Susan)

- 452—**Beautiful, rapid-growing annual climbers,** preferring a warm, sunny situation; used extensively in hanging baskets, vases, low fences, etc.; very pretty flowers in buff, white, orange, etc.; with dark eyes; mixed colors. *Half-hardy Annual.* 4 feet..... $\frac{1}{4}$ oz., 30c; 10c pkt.

TORENIA

- 453—**Fournieri.** A very fine annual; a splendid plant for vases, hanging-baskets, borders, etc.; covered the entire season with a mass of bloom. Sky-blue, with three spots of dark-blue, bright yellow center. *Half-hardy Annual.*..... 10c pkt.

TRITOMA

(Red-hot Poker, Flame Flower, or Torch Lily)

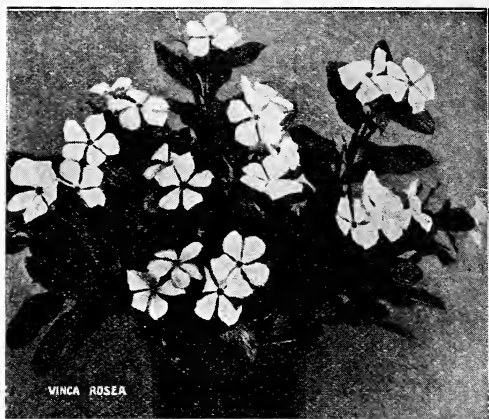
- 454—**Hybrida.** The introduction of new continuous flowering Tritomas has given them a prominent place among hardy bedding plants. It is not generally known that they are readily grown from seed, many flowering the first year if sown early. For immediate results it will be better to get plants, but raising them from seed is highly interesting..... $\frac{1}{4}$ oz., 50c; 10c pkt.

VALERIANA (Garden Heliotrope)

- 455—**Finest Mixed.** Showy, hardy border plants, producing large corymbs of red or white flowers; fine for bouquets; mixed; 2 feet. *Hardy Perennial.*..... 10c pkt.

VERONICA (Speedwell)

- 456—**Spicata.** An elegant hardy border plant, growing about 1 $\frac{1}{2}$ feet high, producing long spikes of bright blue flowers in June and July..... 10c pkt.



VINCA (Madagascar Periwinkle, or Old Maid)

ORNAMENTAL, free-blooming plants and one of the most satisfactory flowering bedding plants we have. It is best to start the seed early indoors or in a hot-bed, but they begin blooming in August from seed sown out-of-doors in May, or as soon as the ground is warm, continuing until frost; or they may be potted and kept in bloom through the winter; a fine cut flower, every bud opening when placed in water; 2 feet. *Tender Annual.* (See cut.)

- 457—**Rosea.** Rose, dark eye..... 10c pkt.
458—**Alba Rosea.** White, crimson eye..... 10c pkt.
459—**Alba Pura.** Pure white..... 10c pkt.
460—**Mixed**..... $\frac{1}{4}$ oz., 40c; 10c pkt.

VERBENAS

TO have the best results, seeds should be started early in the house and the young plants bedded out by the first of June, and they will make a lavish and showy display of flowers until frost. *Half-hardy Annual.*

- 461—**Gigantea Lucifer.** Flowers intense brilliant scarlet with no eye..... $\frac{1}{8}$ oz., 40c; 10c pkt.
462—**Gigantea, Mixed**..... $\frac{1}{8}$ oz., 35c; 10c pkt.
463—**Mammoth Defiance.** Brilliant scarlet; fine for bedding..... $\frac{1}{8}$ oz., 35c; 10c pkt.
464—**Mammoth Candidissima.** Large trusses of pure white flowers..... $\frac{1}{8}$ oz., 35c; 10c pkt.
465—**Mammoth Blue.** Bright blue, in various shades..... $\frac{1}{8}$ oz., 35c; 10c pkt.
466—**Mammoth Pink.** Bright shades of pink; fine..... $\frac{1}{8}$ oz., 35c; 10c pkt.
467—**Finest Mixed.** Our mixture contains every desirable color and shade. They bloom most profusely, and for enormous flowers of rich and superb colors, are unsurpassed..... $\frac{1}{8}$ oz., 25c; $\frac{1}{4}$ oz., 40c; 10c pkt.
468—**Hybrida Grandiflora Royale.** Flowers are enormous size, the individual flowers measuring over an inch and a quarter in diameter, color dark royal blue, large creamy yellow eye..... 15c pkt.
469—**Fine Mixed.** A very satisfactory assortment, containing many fine colors and shades..... $\frac{1}{8}$ oz., 25c; $\frac{1}{4}$ oz., 40c; 10c pkt.

VIOLET (Viola Odorata)

A great favorite, suitable for groups, or borders, and much in demand on account of its profusion of bloom and delightful fragrance. Violet seeds germinate very slowly. *Hardy Perennial.*

- 470—**Finest Mixed**..... 10c pkt.
VIOLAS, or TUFTED PANSIES. (See Pansies.)

WALLFLOWER (Goldlack)

WELL-KNOWN, deliciously fragrant, half-hardy annuals and perennials, blooming early in the spring, with spikes of beautiful flowers. They should be protected in a cold frame in the winter and planted out in April.

- 471—**Single Mixed.** *Half-hardy Perennial.* All colors..... 10c pkt.
472—**Double Finest Mixed.** *Half-hardy Perennial.*..... 10c pkt.



Wild Garden Flowers

"WILD GARDEN" FLOWER SEED

EACH package contains about 100 varieties of hardy flower seeds mixed together, and wherever planted will insure something new almost every day. Is suitable for sowing in shrubbery, under trees, and in beds on which no care will be bestowed, or even for sowing in exposed situations, where wildness is preferred to order and precision.

To those who cannot bestow the necessary care required in a neatly laid out flower garden, the "Wild Garden" presents a substitute, which, for its unusual and varied effect, for cheapness and small amount of labor necessary for its construction, has no rival.

473—Dwarf Sorts. Growing from 12 to 18 inches high. Oz., 25c; 10c pkt.

474—Climbing and Trailing Sorts. Fine for hiding fences, brush and rubbish heaps....Oz., 25c; 10c pkt.

WILD CUCUMBER

(Echinocystis Lobata)

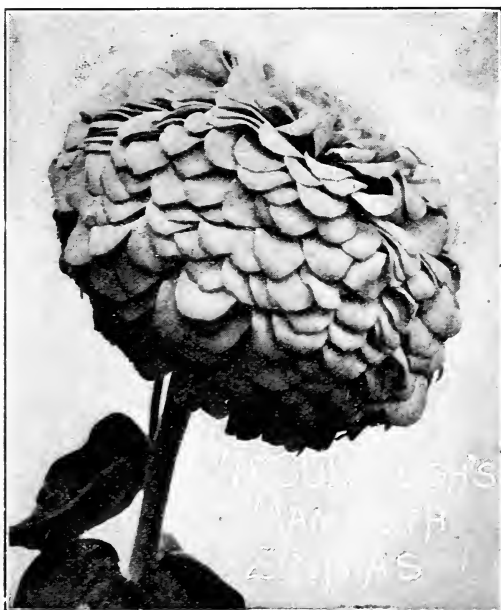
THIS is one of the quickest growing climbers on our list. Should be sown late in the fall or very early in the spring. It is thickly dotted over with pretty, white fragrant flowers followed by an abundance of ornamental and prickly seed pods. For a trellis or pillar, no annual vine is more chaste, and it will quickly cover an old tree or an unsightly building. *Hardy Annual.*

475..... ½ oz., 15c; oz., 20c; 10c pkt.

XERANTHEMUM

(Everlasting, or Immortelle)

476—Double Mixed. Bright and pretty "Everlasting" with silvery foliage and silky flowers in pink, white and purple. *Half-hardy Annual.* ¼ oz., 20c; 10c pkt.

**ZINNIAS (Youth and Old Age)**

THESE attractive and decorative half-hardy annuals are most desirable plants for mixed borders or bedding purposes, and are remarkable for the profusion and duration of their flowers, which are extremely useful for bouquets. The double Zinnias are exceedingly handsome, the flowers being notable for their large size, fine form, brilliancy and diversity of color. The seed can be sown early in the hot-bed or light window and transplanted, or sown later in the open ground. They come into flower early in the summer and keep on blooming until hard frost. *Half-hardy Annual.*

Dahlia Flowered

When in full bloom the flowers often measure 4 inches in depth and 6 to 8 inches in diameter, in form like a perfect decorative Dahlia. When cut from the plant and placed by Dahlias, it is difficult to distinguish one from the other.

We offer the following varieties of the **Dahlia Flowered** Type in separate colors:—

- 477—Crimson Monarch.** Largest and best red...15c pkt.
- 478—Dream.** Lavender turning to purple.....15c pkt.
- 479—Illumination.** Deep rose.....15c pkt.
- 480—Oriole.** Orange and gold.....15c pkt.
- 481—Polar Bear.** Pure white.....15c pkt.
- 482—Scarlet Flame.** Bright scarlet with a blending of orange throughout the petals... ¼ oz., 75c; 15c pkt.

Collection. One packet each of the above six varieties, 60c.

483—Finest Mixed ¼ oz., 60c; 10c pkt.

Giant Picotee

The flowers are very effective in appearance, as the edges of the petals are well marked with a distinct color to the body of the flower, making them very attractive as bedders and cut flowers.

484—Finest Mixed. All colors..... ¼ oz., 50c; 10c pkt.

McCullough's Superb Mammoth Zinnias

THIS is the finest strain obtainable. The flowers are of enormous size, thickly set with velvety petals. The plants are healthy, robust, vigorous growers, branching freely, and make excellent material for groups or cutting. McCullough's Superb Mammoth will be found very superior to ordinary Zinnias. New colors have been added, depth and size given to blooms and a rich velvety lustre to the petals.

485—Mammoth White. **488—Mammoth Crimson.**

486—Mammoth Yellow. **489—Mammoth Scarlet.**

487—Mammoth Flesh Color. **490—Mammoth Violet.**

Each of the above..... ¼ oz., 50c; 10c pkt.

Collection. One packet of each of the above 6 varieties...50c.

491—Mammoth Finest Mixed. Contains all the colors listed above together with many new shades. Be sure and try this wonderful strain of this grand old favorite flower.

¼ oz., 30c; 10c pkt.

492—Lilliput Salmon Rose. The Lilliput type has become very popular within the last two years for general garden use and for bedding and border work, and has become very popular as a florist's cut flower..... ¼ oz., \$1.25; 15c pkt.

493—Victory Quilled. The petals are quilled and twisted, the outside is of a copper-golden color and on the underside various shades of rose and lilac.....10c pkt.

494—Red Riding Hood. Of compact form and covered the entire season with little button-like, intense scarlet flowers not over an inch across; as a border plant it is highly effective..... ¼ oz., 30c; 10c pkt.

495—Elegans Double, Finest Mixed. Semi-dwarf varieties. Many colors..... ¼ oz., 15c; oz., 50c; 10c pkt.

McCullough's

Founded 1838
Established 93 Years

Selected

VEGETABLE SEEDS

for 1931

Our policy adopted many years ago of carefully eliminating all undesirable varieties of Garden Seeds has been an important factor in maintaining our high standard of quality for over three quarters of a century.

TRADE MARKS REGISTERED, MCCULLOUGH'S SEEDS, XXXX, BUCKEYE, SUBURBAN LAWN GRASS, CENTRAL PARK LAWN GRASS.

POSTAGE VEGETABLE and FLOWER SEEDS offered in PACKETS, OUNCES, QUARTER POUNDS and POUNDS sent postpaid at prices quoted except when otherwise noted.

When Ordering BEANS, CORN OR PEAS to be forwarded by mail, be sure to add 8 cents per pound for POSTAGE in first and second zones. For third zone add 10 cents per pound; for all other zones add extra postage in proportion. See Postal rates, 2nd page of cover.

ARTICHOKE

One ounce will produce about 400 plants.

THE Globe Artichoke is cultivated for its flowerheads, which are cooked like Asparagus. Plants set in any good soil, with slight covering in winter, will remain in bearing several years. Seed may be sown indoors and plants potted same as the Tomato and set out in May, or can be sown in hills outside, and thinned out to one plant in each hill.

Large Green Globe.....Pkt., 10c; oz., 60c.

ASPARAGUS SEED

One ounce will produce about 800 plants.

ANY good loamy, not too weedy, garden land is good for growing the plants. Sow in rows 12 to 15 inches apart, as early in spring as the ground is in fit condition, and give good cultivation; also thin the plants to stand 2 or 3 inches apart.

Argenteuil. This variety is largely grown in France for the Paris market. The stalks grow to a mammoth size.....Pkt., 10c; oz., 15c; ¼ lb., 30c.

Barr's Mammoth. A fine green variety....Pkt., 10c; oz., 15c; ¼ lb., 30c.

Columbian Mammoth White. Large, white stalks.
Pkt., 10c; oz., 15c; ¼ lb., 30c.

Conover's Colossal. Large and productive..Pkt., 10c; oz., 15c; ¼ lb., 30c.

Palmetto. A very desirable variety.....Pkt., 10c; oz., 15c; ¼ lb., 30c.

Mary Washington. Asparagus growers whose crops are affected by rust should plant this variety as it is nearer rust proof than any other kind. The tips are tight and firm, and the stalks are large and luscious. When bunched for market it makes a fine appearance.

Pkt., 10c; oz., 15c; ¼ lb., 40c.

ASPARAGUS ROOTS

(See Plants and Roots, end of the Vegetable Seeds.)

BEANS Dwarf or Bush

One pound will plant 200 feet of row—100 to 120 pounds per acre.

WHILE the Bean is a very tender plant and, therefore, should not be planted until there is no more danger of frost, still it often pays to take some risks. Plant in a warm loamy soil at the beginning of warm weather in spring and at intervals for succession until August. Rows may be made 2 feet apart and the beans planted 2 inches deep and a few inches apart in the rows, or 3 to 4 beans in hills 6 to 8 inches apart.

Cultivate and hoe frequently, always, however, when the vines are perfectly dry; working them when wet with rain or dew will cause them to rust and injure the crop. In hoeing, draw the soil up towards the rows or plants. For string Beans gather the pods clean as soon as fit for use. The plants will remain all the longer in bearing.

All varieties of Beans, pkt., 10c. All packets are sent postpaid; for larger quantities by mail, see "Postage" 2nd page of cover.

Green-Podded Varieties

McCullough's Norwood Stringless Green Pod.

This variety is superior to any other green-podded bean grown. It is positively stringless, and ripens a week earlier than the Valentine. The pods which are produced in abundance on the vines are long, straight, round, deeply saddle-backed, brittle, tender and of real good flavor. Has a much larger pod than the Valentine.....Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., 1.85; 15 lbs., \$5.25



Norwood Stringless Green Pod

BEANS

Dwarf or Bush, Green-Podded Varieties—Continued

One pound will plant 200 feet of row.

All varieties of Beans, pkt., 10c postpaid; for larger quantities, by mail, see "Postage" 2nd page of cover.

McCullough's Improved Round Pod Red Valentine. Our stock of this is extra choice. This variety is usually ready to pick in thirty-four days after planting. The pods are very thick and fleshy, of finest quality and unequaled in uniformity of ripening, which latter fact, combined with its earliness, makes it one of the most profitable sorts for the gardener.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.65; 15 lbs., \$4.50.

Bountiful. An improved Long Yellow Six Weeks. Being earlier, harder and producing better and larger pods and more of them. Pods grow to large size, are broad and fleshy; absolutely stringless, tender, of finest flavor and good appearance.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Burpee's Stringless Green Pod. This variety is stringless and remains tender and crisp. The pods are pale green, long and straight, perfectly round and meaty, maturing with the earliest of the green pod varieties.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Full Measure (Perfection Stringless). Highly recommended as one of the most popular varieties for the Market Gardener. Very early and prolific. The pods are long, straight and handsome; meaty, stringless and of good quality; thick, flat or almost semi-round.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Tennessee Green Pod. Very meaty flat pods of large size and good flavor. It is very hardy and an excellent cropper on poor soil or hillside.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

DWARF SHELL BEANS

Horticultural Dwarf. Excellent quality as a shell bean either green or dry.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.65; 15 lbs., \$4.50.

White Kidney, or Royal Dwarf. A superior kind for baking, and is also excellent when shelled green.

Pkt., 10c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.00.

Red Kidney. Similar to White Kidney except in color.

Pkt., 10c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.00.

White Marrowfat. Grown for sale as a dry bean for winter use; excellent shelled, either green or dry.

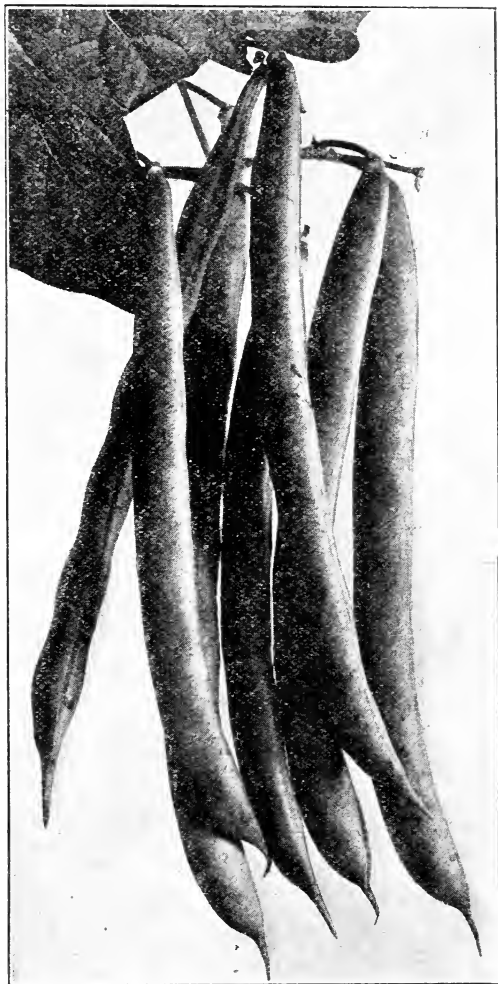
Pkt., 10c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.00.

Mexican or Prolific Tree. Grows 18 inches high, branching like a tree, bearing its pods so high that they do not touch the ground.

Pkt., 10c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 90c; 15 lbs., \$2.25.

Navy. The old standard sort for winter use.

Pkt., 10c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 90c; 15 lbs., \$2.25.



Dwarf or Bush, Wax or Yellow-Podded Varieties

One pound will plant 200 feet of row.

All varieties of Beans, pkt., 10c. postpaid; for larger quantities by mail, see "Postage" 2nd page of cover.

Round Pod Kidney Wax. Long, round, handsome, stringless pods of large size, very solid and full of meat, crisp, brittle and free from rust. Earliest and best Wax Bean.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

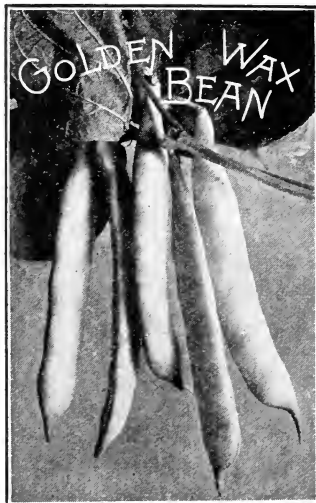
Golden Wax, Improved. Pods long, straight, thick and vines very erect.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Davis' Kidney Wax. Very productive, white-seeded, rustless string or snap variety; long, flat pods, which are very tender while young.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Wardwell's Kidney Wax. Almost entirely free from rust and spots.



The pods are long, very tender, stringless and of excellent quality.
Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Sure Crop. Pods average six inches long, are semi-round, fleshy and entirely stringless. An early thrifty and hardy variety.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Black Wax Improved. Very early and prolific; pods round, meaty, brittle and stringless; deep golden yellow and excellent flavor.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Pencil Pod Black Wax. Magnificent straight pods six to seven inches long, light golden yellow in color, beautifully rounded, meaty and deeply saddle-backed; flesh brittle, solid and entirely stringless, of fine mild flavor.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

BEANS Continued

Dwarf or Bush Lima

One pound will plant 100 feet of row.

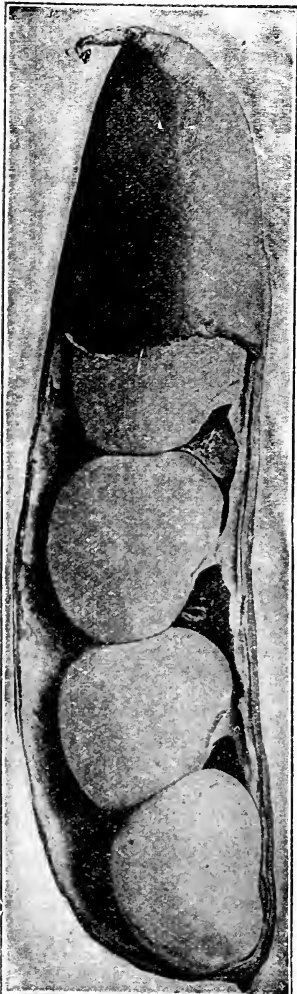
THE Dwarf Lima class can not be recommended too highly. The Beans can be grown and gathered much more easily than the Pole Limas as the plants require no support. They can also be grown closer together than those of any Pole variety. Dwarf Limas are fully equal in quality to Pole Limas and as a rule are earlier maturing.

Limas require a longer season for maturing than other garden Beans. Do not plant till the ground is dry, weather warm and danger of frost is over. If possible, select rich, light soil. Plant eye downward in rows two to three feet apart, and four to six inches apart in the row, covering one and one-half to two inches deep. If planted in hills, make the hills two to three feet apart one way and two to two and one-half feet the other and plant four to six beans in a hill. Hoe often, but only when the leaves are dry.

All varieties of Beans, pkt., 10c postpaid; for larger quantities by mail, see "Postage," 2nd page of cover.

Burpee's Improved Bush Lima. Pods and beans are both larger and thicker than Burpee's Bush Lima, and fully eight days earlier. Plant is a vigorous grower with heavy foliage. Even when of full size the enormous beans are of the most luscious flavor.

Pkt., 10c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.15; 15 lbs., \$6.00.



Extra Large Lima

Fordhook Bush Lima.

This is one of the best Bush Lima Beans in cultivation. It has a distinct upright vigorous growth; the pods, which are borne in clusters well above the ground, frequently contain as many as 5 thick luscious beans.

It matures very early and continues in bearing till frost. This is so far ahead of the old strain of Burpee's Bush Lima, that it should be used instead; the bean is thicker, sweeter and earlier, being also more prolific.

Pkt., 10c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25; 15 lbs., \$6.40.

Burpee's Bush Lima.

This is the true bush form of the old large Lima Pole Bean. It grows vigorously to a height of 18 to 20 inches, forming a circular bush 2 to 2½ feet in diameter, requiring no poles or stakes, yielding from 50 to 100 fine pods, similar to those grown on the Large White Lima Bean.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Henderson's Bush Lima.

For convenience and practical use in the home garden, it is a really good thing. It grows without the aid of poles, in compact bush form, about 18 inches high.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$3.75.



Burpee's Improved Bush Lima

POLE LIMA

One pound will plant 100 feet of row.

OF all the Pole Beans, Limas are considered to have the greatest economic value. The culture is the same as for other Pole Beans except that being more tender, the beans are usually planted one to two weeks later. Plant in hills about three feet apart, and one to two inches deep, using five or six beans to each hill, and set a pole firmly in the center. Manure liberally in the hill with well-decomposed fertilizer.

Thin the plants, leaving three in each hill. Many cultivators consider it best, in planting Limas and other flat beans, to place the eye down, claiming in this way that they will germinate more quickly. Lima Beans for early use may be grown in frames and transplanted.

All varieties of Beans, pkt. 10c. All packets are sent postpaid; for larger quantities by mail, see "Postage," 2nd page of cover.

McCullough's Extra Large Lima

A choice selection of the Large Lima. It produces pods and beans of large size and in great abundance.

This variety is without doubt the best for private gardens. The quality is much better than any other variety, the Beans cooking rich and mealy.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

Early Leviathan Lima.

The earliest variety of Pole Lima; produces pods in clusters. A good variety where the season is short.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

King of the Garden Lima.

A vigorous grower, bearing profusely. The beans are large and of rich flavor.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

Seibert's Early Lima.

The earliest of all the large Limas. Vine is hardy and vigorous, continues in bearing longer than any other; fine quality.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.50; 15 lbs., \$4.00.

BEANS Continued

Pole or Running Varieties

One pound will plant 200 feet of row—90 to 100 pounds per acre.

THE Pole or Running varieties are tender and should be sown two weeks later than Bush Beans. They succeed best in sandy loam, which should be liberally enriched with manure. Form hills 3 to 4 feet apart; plant 6 to 10 beans in a hill, 2 inches deep, leaving space in center for the pole. When well started, they should be thinned to from 4 to 6 plants in a hill.

All varieties of Beans, pkt., 10c. postpaid; for larger quantities by mail, see "Postage" 2nd page of cover.

Kentucky Wonder, or Old Homestead (Green Pod). An old favorite, with long, fleshy, deeply saddle-backed pods. Very prolific, producing an abundance of fine, stringless, crisp beans until late in the season. One of the best green pole beans, producing pods in clusters, ready for use about 85 days from time of planting.

Pkt., 10c; ½ lb., 15c; 1 lb., 30c; 5 lbs., \$1.60; 15 lbs., \$3.50.

Black Kentucky Wonder. This variety produces long pods one-half larger than the brown seeded variety. Pods are round, very fleshy and of good quality. The vines are vigorous, climbing well and very productive, bearing long, light green pods in clusters. This variety is a shy seeder.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; 15 lbs., \$4.50.

White Kentucky Wonder, or Burger's Stringless. This desirable variety is earlier and consequently covers a longer season of productiveness than the brown seeded Kentucky Wonder. Pods are borne in clusters and average six to eight inches in length, entirely stringless, uniformly straight, of a dark green color and of mild, sweet flavor. The dry beans are pure white.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Cut Short, or Corn Hill. One of the best varieties of Corn Beans in use. Can be used as a snap or shell bean. Considered the best Corn Bean for this section.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; 15 lbs., \$4.50.

Horticultural. (Wren's Egg, or Speckled Cranberry). This old favorite is an excellent Corn Bean, green shell bean or dry bean for winter use.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; 15 lbs., \$4.50.

Lazy Wife. An excellent late green-podded pole bean. Pods of medium dark green color, thick, very fleshy and entirely stringless. The pods remain green and tender until nearly ripe. Beans are white and excellent as shell beans for winter use.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; 15 lbs., \$4.50.

McCaslan. The pods, produced in great abundance, are a rich, dark green color, measuring about ten inches long, rather flat and slightly curved. Fine for use as a snap-shot, being entirely stringless when young. If pods are picked before maturing, vines bear till frost. If pods are allowed to mature, they produce a good sized white bean for winter use.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 15 lbs., \$4.50.

Striped Creaseback, or Scotia. A hardy and very productive green-podded cornfield bean. The vines are sturdy and of good climbing habit with small-medium deep green leaves. The pods are long, about 6 inches, very cylindrical or completely rounded, distinctly crease-backed, very fleshy and of excellent quality. The color when in condition for use as snaps is light silvery green, becoming tinged with purple as the pods mature. This variety is especially suitable for growing in corn for snaps.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.35; 15 lbs., \$3.50.

Tennessee Wonder, or Egg Harbor. Large green pods, curved, double barreled, tinged with purple and wrinkled, depressed between each of the eight or nine seeds. Considered one of the largest of all cultivated beans.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60; 15 lbs., \$4.50.

White Creaseback. A good grower and very productive. Pods 5 to 6 inches long, perfectly round, with a crease in the back. The pods are stringless, fleshy and of good quality.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.00.

White Sickle. Somewhat like the Kentucky Wonder, but has a nice white bean when dry and makes an excellent shell bean for winter. Very popular in the South.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.25; 15 lbs., \$3.00.

Scarlet Runner. An ornamental climber. Bright scarlet flowers; pods are edible when picked young.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c.



Kentucky Wonder

Ohio Wax Pole. Pods usually 7 inches long, solidly meaty and entirely stringless; commences to bear when scarcely higher than the bush variety, and keeps on producing until killed by frost.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60.

Golden Cluster Wax. The pods are from 6 to 8 inches long, stringless, very tender and of delicate flavor.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.60.

BROCCOLI

Green Sprouting. A distinct variety, extensively cultivated by Italian gardeners. Plant forms a large, solid head which remains green. When the central head is cut, numerous sprouts develop from the leaf axes, each sprout terminating in small green heads, which are bunched for market.

Pkt., 10c; ½ lb., 15c; oz., \$1.25.

Purple Cape. Very similar to White Cape, excepting in color, heads being of a brownish purple.

Pkt., 10c; oz., 50c.

White Cape. Heads compact, good size and of a creamy white color; one of the most certain to head.

Pkt., 10c; oz., 50c.

BRUSSELS SPROUTS

SOW seed for plants in frames or open ground. Set plants in early spring, and for succession up to July, making rows 3 feet apart and having the plants stand 1½ to 2 feet apart in the row. Cultivate same as Cabbages.

Dwarf Improved. Pkt., 10c; oz., 35c.

for Better Vegetables

VIGORO

Specialty prepared plant food

"SEEDS ARE DIFFERENT"

Seeds are different from manufactured merchandise, because they are produced by the hand of Nature and not by the hand of man.

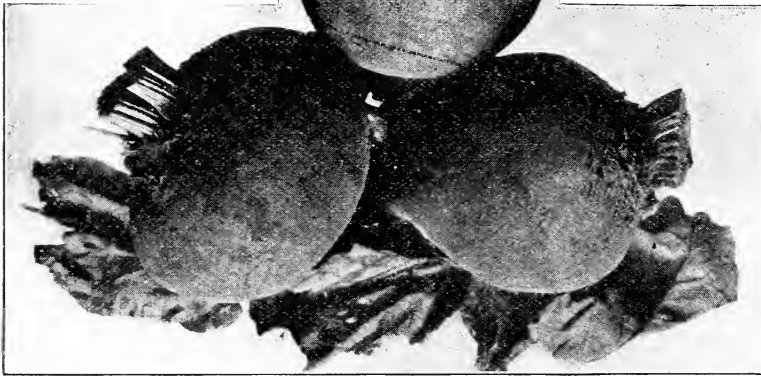
BEETS

One ounce will sow 100 feet of drill—12 pounds for an acre.

THE soil which is best suited is that which is rather light and thoroughly enriched with manure. For an early supply sow in spring as soon as the ground becomes fit to work, in drills twelve to sixteen inches apart and one inch deep. Or seed may be sown under glass four weeks sooner, and the young seedlings transplanted to open ground to give an extra early crop.

For main crop, sow the first week in May, and for winter use sow in June.

When the plants have attained three or four leaves, thin out so they may stand five or six inches apart. Keep free from weeds by hand-weeding or hoeing. In October roots may be taken up and stored in the cellar or in pits outside like potatoes, care being taken that they are not bruised or injured in the process.



McCullough's "Norwood"

Swiss Chard or Spinach Beet

Swiss Chard or Silver Beet. This variety of Beet does not make a large root, and is grown only for its leaves, which make splendid "greens" and the broad, white stalks or midribs are cooked and served like Asparagus.

Giant Lucullus. This is a decided improvement over the common variety. The plants grow from 2 to 2½ feet tall and when fully developed produce about a dozen creamy white curled leaves, which are carried on broad thick stalks, about 12 inches long. The leafy portion of the plant should be cooked like Spinach and the stalks like Asparagus.

Pkt., 10c; oz., 15c; ¼lb., 35c; per lb., \$1.25.

Beets—Cattle and Sugar SUGAR BEETS FOR STOCK

One ounce will sow 200 feet of drill—five and one-half pounds for an acre.

SUGAR Beets are not as heavy yielders as the Mangels, but are of superior quality, containing a large amount of sugar. They are excellent for feeding cows, improving wonderfully the quantity and quality of the milk.

Vilmorin's Improved. A medium sized white Sugar Beet brought by the most careful selection to the highest perfection, both in shape and color of roots. Greatly esteemed by sugar manufacturers.

Pkt., 10c; oz., 15c; ¼lb., 25c; per lb., 75c.

Lane's Imperial. One of the best for field culture: early large and productive.

Pkt., 10c; oz., 15c; ¼lb., 25c; per lb., 75c.

Giant Half-Sugar Green Top. Longish ovoid; red skin; white flesh; crisp and fine.....

Pkt., 10c; oz., 15c; ¼lb., 25c; per lb., 75c.

MANGEL-WURZELS

Five and one-half pounds for an acre.

FATTENING, breeding and milk cattle do equally well on them. About one-fourth of the daily rations should be of roots. Sow in rows 2½ feet apart as soon as the ground can be thoroughly worked. Cover seed about 1½ inches. When 4 inches high, thin to 8 inches apart.

Mammoth Long Red. Roots of large size and excellent quality.

Pkt., 10c; oz., 15c; ¼lb., 25c; per lb., 75c.

Golden Tankard. Bright yellow, large, handsome, heavy cropper.

Pkt., 10c; oz., 15c; ¼lb., 25c; per lb., 75c.

McCullough's Norwood. A superb early maincrop Beet, both for market and the home garden. The roots are of neat turnip shape, growing three or four inches in diameter, deep through, smooth and entirely free from small rootlets. Flesh deep blood-red, tender, and of rich flavor. The roots can be used early in the season when only partially grown, being ready for use almost as quickly as the Extra Early sorts and of better quality. It retains its choice quality and freedom from woodiness until the beets have reached their full size. Foliage is small, of a rich bronze color.

Pkt., 10c; oz., 15c; ¼lb., 35c; per lb., \$1.25.

Arlington. A dark-leaved, early blood variety, closely following Eclipse in maturing, but of darker color and superior quality. An excellent Beet for market gardeners.....

Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.

Bassano. (The Table Sugar Beet). A very early flat variety, tender, juicy; flesh white and rose-colored, very sweet..

Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.

Crimson Globe. A handsome early or main-crop variety, of medium size, almost globe shaped and entirely free from rootlets. Foliage rich bronzy purple. The flesh is blood-red, slightly zoned.

Pkt., 10c; oz., 15c; ¼lb., 35c; per lb., \$1.25.

Crosby's Improved Egyptian. An improved strain of the Egyptian Beet, especially recommended as an extra early sort. It is much thicker than the original strain.

Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.

Detroit. Color of skin dark blood-red, flesh bright red, zoned with a lighter shade, very crisp, tender and sweet.

Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.

Early Blood. Flesh dark red, a standard round variety with small top.

Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.

Early Wonder. A distinct extra early Turnip-rooted variety of the finest table quality. The flesh is solid, crisp, sweet, and of a brilliant fiery red color. It is perfectly globular in form with smooth skin, a tiny tap root, and very slender leaf stalks.

Pkt., 10c; oz., 15c; ¼lb., 35c; per lb., \$1.25.

Eclipse. One of the best early sorts, with a small tap root and small collar. Flesh dark red, zoned with a lighter shade, sweet, crisp and tender.

Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.

Edmand's Early. Uniform small top, bronzy red; exceedingly tender and sweet; skin blood-red; flesh dark red.

Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.

Egyptian Extra Early. One of the earliest, of good quality and medium size; a fine forcer; small top.

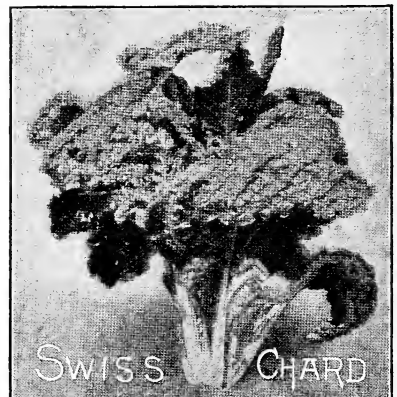
Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.

Half Long Blood. One of the best for winter use. Roots are only half as long as the Long Blood, but weigh as much on account of their thickness.

Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.

Long Dark Blood. A good late variety for fall and winter use; sweet and tender.

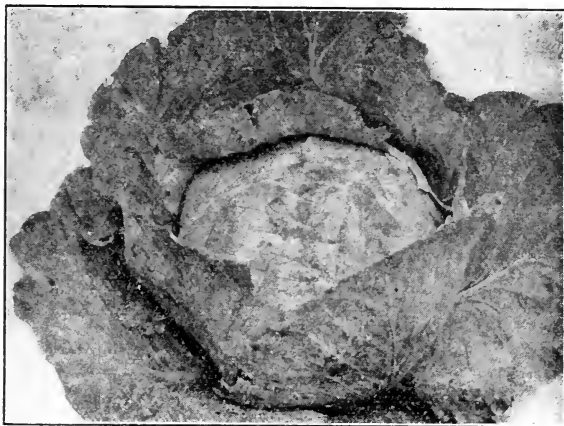
Pkt., 10c; oz., 15c; ¼lb., 30c; per lb., \$1.00.



C A B B A G E

Sow one ounce for 2,500 to 2,800 plants; five and one-half ounces for one acre.

FOR plants of the earliest sorts, sow seed in January or February under glass, and prick out in flats or frames about 2 inches apart each way. Transplant to open ground as soon in spring as the land can be properly prepared. A rich, warm, fibrous loam is best. Have the plants in the rows 20 to 24 inches apart, and rows at least 2 feet apart. Give thorough cultivation and irrigate in dry weather if practicable. Protect from the ravages of cutworm, maggot and green worm. A little nitrate of soda applied around the plant is of great benefit. For late Cabbage plants, sow seed in drills in open ground during April and May, and transplant in June and July, giving the plants more room than allowed for earliest Cabbages. Dusting with Slug Shot, tobacco dust, insect powder, etc., or splashing with hot soapsuds, especially Fish Oil Soap solution, are good and safe remedies for some of the insect pests attacking plants of the Cabbage.



McCullough's Early Market. A new, early, round head Cabbage. It will produce double the crop of any other early variety; always extremely solid and fine ribbed. It is very dwarf and compact, allowing of close planting. Heads fine, ball-shaped, and with few outside leaves. Size ideal for marketing.
Pkt., 10c; oz., 60c; $\frac{1}{4}$ lb., \$2.00.

Golden Acre. A new, early, round-headed Cabbage which closely resembles Copenhagen Market in type. As its name implies, it is a money-maker. It is 8 to 10 days earlier than Copenhagen Market but is smaller and can be planted closer. Because of its earliness and fine quality it commands a higher price than any round-headed Cabbage....Pkt., 10c; oz., 60c; $\frac{1}{4}$ lb., \$2.00.

McCullough's Early Louisville Drumhead. Originated by us many years ago, and is still the peer of all other varieties for early market purposes throughout this section. It is highly esteemed by the market gardeners, and it will stand hot weather better than any other sort; will stand the entire summer without bursting. Our Louisville forms large, solid heads, and is the earliest large-heading variety, while, if planted later, it makes excellent heads for winter. For winter use, sow later in the season.....Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Early Jersey Wakefield. One of the best extra early varieties in cultivation. The heads are pyramidal in shape, having a blunted or rounded peak. We believe our selected stock has no equal.
Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Copenhagen Market. The earliest large, round headed sort ripening early and uniform. It has few outer leaves and it grows close to the ground on a short stem.
Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Charleston, or Large Wakefield. Has all the characteristics of the Early Jersey Wakefield, but of greater size, and is only a few days later.
Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Early Summer. A second early with large, solid, flattish heads, coming in a few days later than the Wakefield; a sure header.....Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

All Head, Early. The largest heading of the second early sorts. Heads are solid and uniform in color, form and size.....Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Glory of Enkhuizen. Heads are globe-shaped, medium size and handsome dark-green color. The quality is excellent.....Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Early Dwarf Flat Dutch. One of the best second earliest. Heads are large, solid and nearly flat on top.
Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Succession. A second early, round-head sort. Heads are solid, keep well and are of splendid quality; color, light green.....Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

All-Seasons. Large, hard, solid and slightly flattened heads. As good for autumn or winter as for early summer.
Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Surehead. A good strain of late Flat Dutch. Heads grow large and are of good texture. It is also a good keeping variety.....Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

McCullough's Early Louisville Drumhead

McCullough's Premier Late Flat Dutch. A variety for winter market; has no superior. Heads large, round, solid, broad and flat on top. They open white and crisp, are tender and well-flavored. The best variety for keeping. Our stock has been carefully selected for several years. No better strain on the market.
Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Large Late Drumhead. A favorite winter variety. The heads grow to very large size and heavy weight. Solid and of good quality....Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Hollander Yellow Resistant. This is a strain of Hollander, or Danish Ballhead, which originated in Wisconsin where the disease known as "yellows" is very destructive. It should be used where this disease is prevalent.
Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Danish Ballhead. (Danish Grown). Heads of good marketable size, averaging about 8 pounds, nearly round, solid and superior quality.
Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Danish Roundhead. It is slightly larger and produces more weight to the acre than Ballhead. The heads are produced about ten days earlier, are splendid keepers and bring the highest prices on market in winter.
Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

RED CABBAGE

Mammoth Rock Red. The largest and most solid of the red varieties; a sure heading sort and tender.
Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

SAVOY CABBAGE

THEY are particularly adapted to private use where quality, rather than quantity is desired. Grown in fall and allowed to be touched by frost, it is one of the most delicious of all vegetables.

American Drumhead Savoy. Heads large and very finely curled; short stalk and compact grower; an excellent keeper.....Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

CHINESE OR CELERY CABBAGE

Should be sown about August 1st, at the same time as Turnips, Spinach and other fall vegetables.

Wong Bok. It really is not a cabbage but a Mustard, forming a compact, elongated, tightly folded head. Weigh from 5 to 8 lbs. and are good all the way through. Delicious served as a salad with a French dressing, or like Cole Slaw, with Mayonnaise. The green portion of the leaves may also be served like Spinach, while the heavy midribs are very palatable like Swiss Chard, or Asparagus. Wong Bok is entirely self folding and the heads need no tying up or blanching of any kind. Should not be sown before August 1.
Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Pe-Tsai. This fine vegetable resembles Cos Lettuce. The head is large and compact, and all but the outer leaves blanch a creamy white. Very crisp and tender, and in every way adapted for the home garden.
Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

CARROTS

One ounce will sow 200 feet of drill—three and one-half pounds for an acre.

A light sandy loam, well-tilled and manured the previous year, best suits the Carrot. For early crop sow as early as the ground can be worked, in drills 10 inches apart, and thin to 5 inches apart. The Early Market, owing to its extreme earliness, is used for hot-bed culture. The late sorts: long and half-long varieties (main crop), sow from middle of May until first of July in drills 12 to 14 inches apart. Thin out to 6 and 7 inches in row. Keep the hoe at work. Carrot seed is slow to germinate.

Carrot Seed grown for stock requires one-half ounce for 200 feet of drill, one and one-half pounds for an acre.

Early Market, Stump-rooted. A very choice strain, tender, fine-grained flesh. An enormous producer, handsome, uniform stumped roots. Free from core and of a deep golden yellow color. Can be sown thick, and consequently well adapted for frame culture. A most excellent forcer.....Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

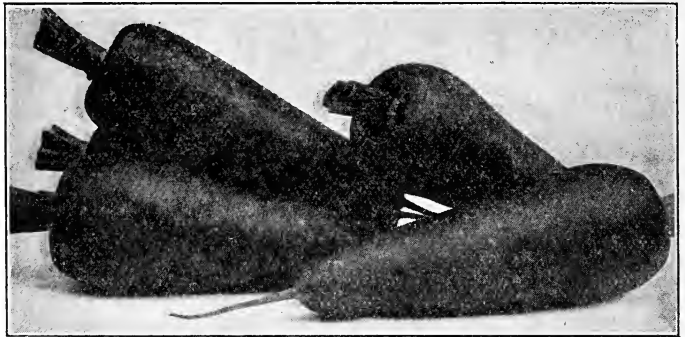
Early Scarlet Horn. An early red summer variety; fine grained and good flavor.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.
Coreless Chantenay. An improved Chantenay having shorter tops and finer foliage, and a little earlier in maturity than the regular Chantenay. Core and flesh rich orange color. The outstanding features of the strain are the smoothness and refinement of the roots, the excellent color of both the exterior and interior. The stock is very even, being uniform in size and appearance and the best variety for the market gardener and shipper.....Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Chantenay. It is about 6 inches long, thick through and decidedly stump-rooted. The flesh is a deep orange red, fine-grained and of a splendid flavor. It is very early and always produces smooth shapely roots. Its fine appearance finds for it a ready market; its splendid table qualities keep it in demand.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Danvers. A cylindrical-shaped Carrot of good size and stump-rooted, rich, dark orange color, grows to a large size, smooth and the flesh very close in texture with little core.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.



Chantenay

Hutchinson. A variety that was developed by selection from the Danvers. It has slightly darker orange skin, grows an inch or two longer, and is in shape pretty well down to the root. An extra-heavy yielder. Originated with a prominent gardener in Massachusetts.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Oxheart or Guerande. Intermediate length; is fully 3 to 5 inches in diameter; quality extra good. Some sorts require digging, but the Oxheart can be easily pulled. It is especially adapted to shallow soils, where the longer sorts would not thrive as well.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

McCullough's Intermediate. A large, handsome main-crop variety. The root, 10 or 12 inches in length, is very broad at the neck, 2 or 3 inches through, and tapers evenly to the small tap-root. It grows smoothly and uniformly and combines with its other merits rich, reddish-orange flesh, tender, sweet and entirely free from woody coarseness even at maturity.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Nantes Half-Long Scarlet. A stump-rooted variety, having little or no core. Flesh red and of fine flavor.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Improved Long Orange. A standard late variety; deep orange color. It is of excellent table quality and is highly nutritious for stock.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

CAULIFLOWER

One ounce of seed will produce about 2,200 plants.

FOR early use, sow in hotbeds in January and February. When plants are large enough, transplant three inches apart in boxes or other hotbeds until time to plant out. If hardened off they are seldom injured by planting out as early as the ground can be worked, 2 $\frac{1}{4}$ feet apart each way. When practicable, seed may be sown in rich soil from the middle of September to middle of October, and transplanted in frames, protect during severe weather and give light and air on mild days. The early varieties should be brought to maturity before summer heat sets in. The late sorts mature in the autumn and are cultivated same as winter Cabbages.



McCullough's Earliest Dwarf Erfurt. Is beyond question the best for all purposes. It heads where others fail. Year after year this has become more popular, until leading market gardeners now grow it entirely, having discarded all the older varieties, as they find our strain of Erfurt to be the surest-heading. On account of its dwarf and compact habit, the plants may be set out 20 to 22 inches each way, so that from 12,000 to 14,000 can be planted on an acre. For pickling it is the standard variety. The compact and solid texture of the snow-white heads, combined with delicious flavor, surpass all others.

Pkt., 20c; $\frac{1}{4}$ oz., 75c; oz., \$2.50.

Early Snowball. An extremely early dwarf variety, producing magnificent white heads, of fine quality. Well adapted to hot-bed culture.

Pkt., 20c; $\frac{1}{4}$ oz., 75c; oz., \$2.50.

Danish Giant. A large heavy sort, maturing soon after Dwarf Erfurt. It is without exception the best and surest heading of all for summer use.

Pkt., 20c; $\frac{1}{4}$ oz., 75c; oz., \$2.50.

Early Paris. Heads large, white, compact and solid; tender and delicious.

Pkt., 10c; $\frac{1}{4}$ oz., 30c; oz., \$1.00.

Autumn Giant. One of the finest late varieties, of robust habit, heads large, compact and thoroughly protected by leaves.

Pkt., 10c; $\frac{1}{4}$ oz., 30c; oz., \$1.00.

Special price to market gardeners.

CELERY

One ounce will produce about 25,000 plants

TO grow early Celery, sow the seed late in March in a hotbed or box; and for later crops, as soon as the weather becomes warm, sow in the open ground, cover lightly, or better still, roll or press it in. Shade the young plants for a week or ten days, and do not let the soil dry out. The tops may be shorn off once or twice before planting, so as to insure "stocky" plants, which will suffer less on being transplanted. When from four to six inches high, transplant in broad, shallow trenches, or on the level ground, setting the dwarf sorts into rows three feet apart, and the tall varieties four feet apart in the rows. The soil should be light, highly manured, partially shaded and moist, or near water, as the plants must be freely watered in dry weather, but it should not be put directly on them. Earthing up checks growth and should not begin until quite well grown, then earth up gradually, keeping the leaf stalks close together, so that the soil may not fall into the center of the plant, but never earth up in wet weather, nor when dew is on them. That intended for winter and spring use needs little banking; when stored for winter it will naturally blanch beautifully white.

McCullough's Golden Yellow. Extra selected stock. We have been furnishing our customers this strain of Paris Golden Yellow Celery for a number of years and it is pronounced by one and all the finest strain they have ever seen. The color is a rich golden yellow, stalks are very solid and tender, flavor is delicious, has large heart, grows medium height, and is without doubt the best early Celery on the market. We are confident you can not obtain anywhere a strain of Paris Golden Yellow Celery superior to our own particular selected stock.

Pkt., 10c; oz., \$1.00.

Golden Plume. This is a selected strain of Golden Self-Blanching, having a beautiful golden color and that rich, nutty flavor so much desired by lovers of fine Celery. It resists blight and rust to a remarkable degree, matures early, and keeps a long time. The Golden Plume is a good shipping sort. It grows to large size and of fine proportions. A very attractive sort, hence an easy one to sell. Pkt., 10c; oz., \$1.00.

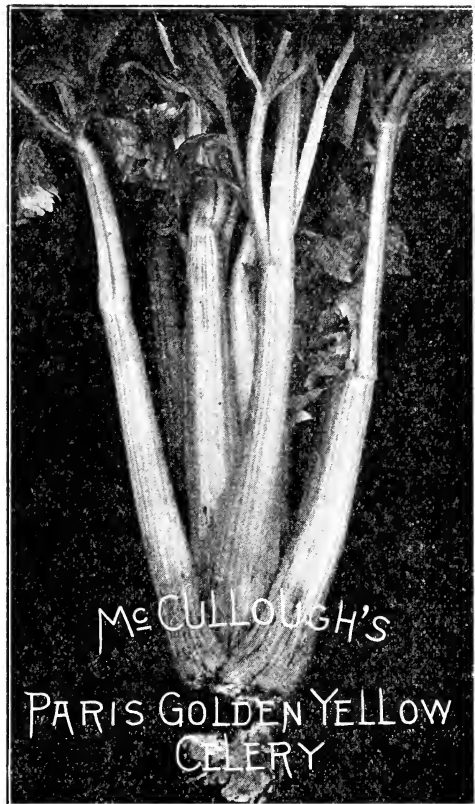
Golden Self-Blanching. An early, desirable sort, requiring but little labor to blanch. The heart is a rich, golden yellow, with light, yellowish-green outer leaves. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.25.

White Plume. Is unsurpassed for fall and early winter use, requiring very little earthing up to blanch it. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Easy Blanching. Stalks thick, brittle and excellent flavor. Adapted to early use as well as storing for winter. Those who have not been successful with other sorts, should give this a trial. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Giant Pascal. A superior keeping sort. The stalks are very large, thick, solid, crisp, and of rich nutty flavor. It blanches very easily and quickly, and retains its freshness a long time. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Giant White Solid. The best of the large growing sorts. This variety is suitable for Southern sections of the country, as it grows freely in a hot or dry atmosphere. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.



Snow White. A pure white, self-blanching variety. Vigorous growth, ease of blanching, size, richness of flavor, crispness and purity, make it an ideal Celery. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Triumph. The best late Celery. A strong and vigorous grower, with very large but crisp, brittle, tender and fine flavored stalks. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Celeriac, Turnip Rooted Celery

SOW early in spring. Transplant in May into rich, mellow soil in rows eighteen inches apart and six inches in the row. Grown mostly for its bulbous root.

Large Erfurt. When sliced, with vinegar and oil, makes a delicious salad. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

CHICORY

Large Rooted or Coffee. Grown for the large, thick roots, which are dried, roasted and ground as a substitute for Coffee. Soil should be light, rich and deeply worked. Cultivation the same as carrots. Pkt., 10c; oz., 25c.

Witloof Chicory, or French Endive. Seed should be sown in the open ground not later than June in drills twelve to eighteen inches apart, thinning plants so they will stand about three inches apart. The plant forms long, parsnip-shaped roots, which should be lifted in the fall, and after cutting off the leaves store in soil in a cool place until wanted for forcing. To force, plant closely in trenches deep enough to permit covering the roots with soil 8 inches deep. If quicker growth is desired mulch with manure 2 feet deep. Requires four to five weeks to force. The blanched head is the edible portion and should be cut with a portion of the neck attached to it. The principal use of Witloof is as a winter salad, and it is most delicious served with French dressing and eaten like Cos Lettuce. Pkt., 10c; oz., 25c.

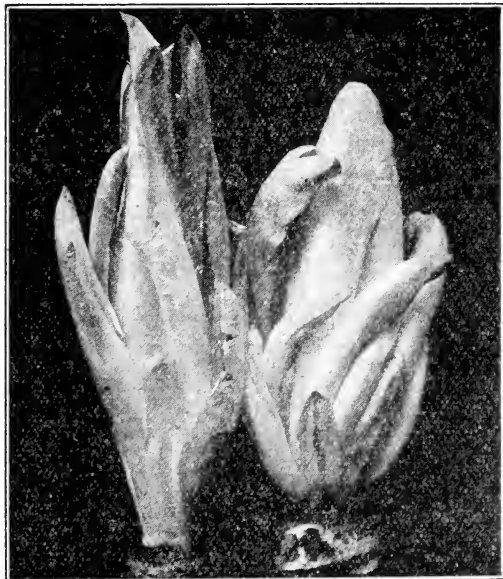
CHIVES

CHIVES are of the onion type. Are grown early in the spring for giving a mild flavor to various dishes. When planted in small clumps they will grow rapidly and increase so as to render division necessary. If not allowed to flower will produce longer.

Per pkt., 10c..... 3 pkts., 25c.
Clumps, 10c each..... per dozen, \$1.00.

COLLARDS

A SPECIES of Cabbage, forming a mass of leaves on a tall stem, very popular in the Southern States as boiling-greens during the winter months, and also furnishes green forage for poultry and stock during winter. Cultivation same as Cabbage. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c.



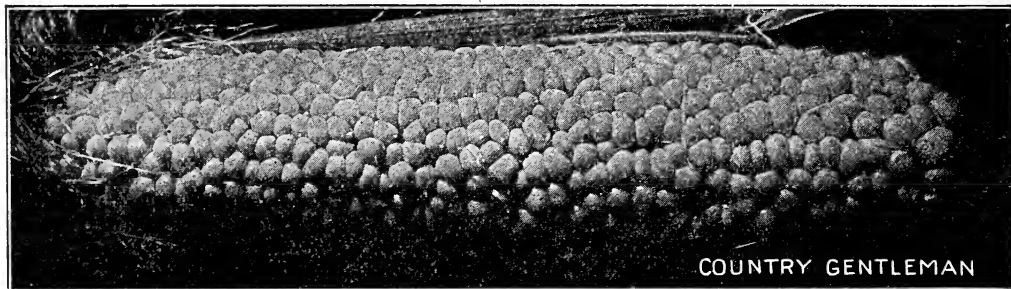
Witloof Chicory

C O R N, Sweet or Sugar

One pound will plant 200 hills—10 to 12 pounds per acre.

THE Sweet or Sugar varieties, being liable to rot in cold or wet ground, should not be planted before May or until the ground has become warm, and for a succession continue planting every two weeks until the middle of July, in rich, well manured ground, in hills 3 feet apart each way, covering about half an inch, and then thin out to 3 plants to a hill, or plant in rows 4 feet apart, and to stand 8 inches apart in the rows.

All packets are sent postpaid; for larger quantities by mail see "Postage" 2nd page of cover.



McCULLOUGH'S NEW WONDER. Produces 5 to 7 ears to a stalk. A high yielding sweet corn developed by Mr. W. W. Kessler, Madison, Indiana, who experimented with same about 35 years. Mr. Kessler saw the possibilities of large profits in roasting ears and set out to develop a corn that would not only produce two good ears, but as many more as a stalk could carry. His result is a corn with five to seven ears to the stalk, a very sweet, good flavored, white sweet corn, ready for roasting ears in 65 to 70 days. The stalk is heavy, which stands erect and is not affected by dry weather like many other varieties. Give this corn plenty of fertilizer, ample room and thorough cultivation and you will get results. Ground suckers should be kept off.

Pkt., 10c; ½ lb., 40c; 1 lb., 75c.

McCullough's Cincinnati Market or Club Zig Zag Evergreen. Originated in this market and was introduced by us, has become the best seller on the Cincinnati market. A late Zig-Zag Evergreen Corn, the ear ordinarily being twice the size in diameter of any other sort, while in sweetness and flavor it cannot be excelled.

Pkt., 10c; ½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.85; 15 lbs., \$5.25.

Alpha. The earliest sweet corn. The ears average six to seven inches long are eight rowed. The stalks average about four feet high. Ears are set low and close to the stalks. For the market grower who reaps an extra profit by getting his produce on the market ahead of his competitors this will be a money-maker; for the home garden it will produce desirable ears for the table a week ahead of the next earliest variety.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

Premo. Extra early variety. It can be planted, early, as the young plants will withstand slight frosts. The stalks are strong and vigorous, growing about 5 feet in height, bearing one or two fine ears to a stalk. The ears are large for so early a variety. The grains are of medium size, well filled to each end of the ear, and of a fine, sweet flavor.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

Early Sheffield. The stalks are strong and vigorous, bearing one or two fine ears to a stalk. The ears are large and entirely free from smut. The grains are of medium size, 10 to 12 rowed, well filled to each end of the ear; juicy, and of a fine sweet flavor.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

Kendel's Early Giant. Very early, fit for use 60 days from planting. Ears large, 8 to 10 inches in length, twelve rows to a cob. Kernels pure white, sweet and tender.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

Golden Sunshine. The earliest of the Golden Bantam type, maturing a week to ten days earlier than that variety. More dwarf in habit than Bantam, with ears 6½ inches long, containing 12 rows of broad, yellow, sweet grains. Especially desirable for its extreme earliness.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.65; 15 lbs., \$4.50.

Golden Bantam. It is not only the sweetest, but also one of the hardest. The ears are from 6 to 7 inches long, eight rowed, filled with broad, sweet, golden yellow kernels of a delightful flavor. One of the best sorts for successive plantings.

Pkt., 10c; ½ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 15 lbs., \$3.15

Golden Giant. It excels all the other early varieties of corn in size, productiveness and quality; and all the late varieties in quality and early maturity while equaling them in size.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.65; 15 lbs., \$4.50.

Whipple's Early. Of the narrow-grained Evergreen type, but ready for use much earlier. Ears 8 to 9 inches long, 16 to 18 rows of pearly white grains. It is by far the earliest of the narrow-grained Evergreen types and has a larger sugar content.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

Howling Mob. A large, medium early white Sweet Corn. Ears are 7 to 8 inches long, with 12 to 14 rows of pure white grains. A splendid sort for the Market Gardener as well as for home use.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

Early Evergreen. An early strain of Evergreen of great value. This variety resembles the Stowell's Evergreen, but is ready for use much earlier, and remains in good condition equally as long. The ears grow to a good size, usually about 7 inches long, and contain from 16 to 18 rows of deep, sweet grains.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

Country Gentleman. One of the richest flavored of all the late varieties. As a table Corn this variety stands unrivaled, and without doubt is the most luscious of all varieties of Sweet Corn. The plump, pearly-white kernels are of great depth. Ears average 9 inches long by 2 inches in diameter.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.65; 15 lbs., \$4.50.

Stowell's Evergreen. The standard variety, both for home use and market, and is the general favorite. The ears are of a large size, grains deep, exceptionally tender and sugary, and has the advantage of remaining longer in the green state than any other.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.65; 15 lbs., \$4.50.

Zig-Zag Evergreen. This is one of the sweetest and best late Sweet Corns. The ears are as large as those of the Evergreen, but the kernels are placed irregularly or zig-zag upon the cob, which is always an indication of great sweetness.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.65; 15 lbs., \$4.50.

Late Mammoth. A late variety, producing ears of very large size and fine flavor.

Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 5 lbs., \$1.65; 15 lbs., \$4.50.

Black Mexican. Black-grained variety; sweet, tender; must be picked young to avoid a black appearance when cooked.

Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.40; 15 lbs., \$3.75.

GARDEN CORN

Adams' Extra Early. The hardest and earliest variety for table use, but not a Sugar Corn; can be planted earlier than any other corn.

Pkt., 10c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 85c; 15 lbs., \$2.25.

Adams' Early. While not a Sugar Corn, is a tender white corn for the table; can be planted earlier and will be ready in sixty days.

Pkt., 10c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 85c; 15 lbs., \$2.25.

Adams' Improved. A larger variety; recommended for extreme early and late planting.

Pkt., 10c; ½ lb., 15c; 1 lb., 20c; 5 lbs., 85c; 15 lbs., \$2.25.

CUCUMBERS

Use one ounce of seed to 50 hills, 2 to 3 pounds per acre.

FOR very early Cucumbers, sow April 1st, in a hotbed upon pieces of sod (grass side down), so that they can be readily transplanted to the open ground, in rich soil, when danger of frost is over, or protect by handglasses. For early use, plant, if the weather has become settled and warm, in hills 4 to 6 feet apart each way; thin out to four of the strongest plants to each hill, after all danger from insects is over. They succeed best in a warm, moist, rich, loamy soil. Continue planting at intervals for a succession. The Cucumbers should be gathered when large enough for use, whether required or not; if left to ripen, it destroys their productiveness. For pickles, plant from June until the middle of July. The yellow-striped cucumber or squash beetle is the most serious insect enemy of this crop.

Bordeaux Arsenate of Lead Mixture is by far the best remedy yet discovered. Dilute it with water, 3 ounces to the gallon, and spray it on the vines when in danger of the beetle or blight.

McCullough's Special An excellent Cucumber for both forcing and outdoor use. The fruit grows 11 to 15 inches long, slim, slightly pointed, a dark glossy green color, which they keep until ripe. In quality it is very tender, brittle and of fine flavor. A vigorous grower, withstanding blight better than other long sorts.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.50.

Longfellow. The vines are exceptionally healthy and productive and fairly early. The fruits will average 12 to 14 inches in length by $2\frac{1}{2}$ inches in diameter and are very symmetrical. The color is all that could be desired and this variety will retain its dark-green color when shipped to distant markets. An ideal type for the private garden. This variety, unlike most other sorts, succeeds equally well in the garden or the greenhouse.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Davis Perfect. Splendidly adapted for growing either under glass or in the garden. In color, a dark glossy green; shape, slim and symmetrical, with an average length of 10 to 12 inches. They are as early as the earliest strain of White Spine.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Early Fortune. The finest type of White Spine. Early and very productive; fruit grows 9 inches long, slightly tapering, flesh, white, firm and crisp with very few seeds; color dark green. Quality is excellent, either for the table, or pickling.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Improved White Spine. The favorite market variety. Largely grown South for Northern Markets, early in the season. The fruit grows from 7 to 10 inches long, is quite smooth, of a deep green color and full at both ends.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Jersey Pickle. As a pickling variety is unsurpassed. Its characteristics are its uniform growth and its immense productiveness.

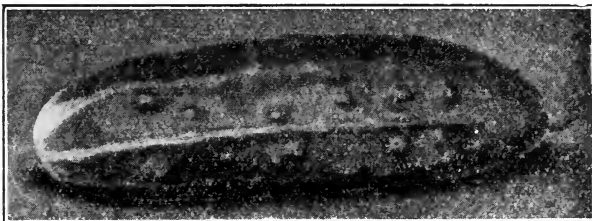
Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Early Cluster. A much esteemed early variety; growing in clusters; is extremely productive.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Early Frame. A good variety for pickling and table. Medium size.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.



Ohio White Spine

Nichol's Medium Green. One of the best for pickling, and excellent for forcing or slicing. Always straight and smooth. In length it is between White Spine and Long Green.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Long Green Improved. A standard late sort, fruit 12 to 14 inches long, slender, more or less warted, tapering towards the stem end; Color dark green, flesh white and firm. Excellent for table and makes a hard, brittle pickle. Extra selected stock.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Long Green. A standard late sort, crisp and tender, very prolific, excellent for the table and makes a hard, brittle pickle. Pkt. 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Japanese Climbing. It is suitable for growing either in frames or in the open ground. It is very early and exceedingly productive. The fruit is excellent either for the table or pickling. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Gherkin. A very small prickly variety, used exclusively for pickling, for which purpose they should be gathered while young and tender.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

ENGLISH FORCING CUCUMBER

The best for forcing, attaining a length of twenty to thirty inches. They can be grown in hotbeds, where the temperature does not fall below 65 degrees at night.

Duke of Edinburg. Very large and long, dull green, quite smooth; packet of 10 seeds. 25c.

Telegraph. Free bearing, long and extensively grown; packet of 10 seeds. 25c.

CRESS, Water and Garden

SOW thickly in shallow drills early in the spring, and at intervals throughout the season for a succession, as it soon runs to seed. Water Cress requires a stream of running water, ditch, or pond, in which it will grow without care, except at first keeping weeds from interfering with it.

Extra Curled or Peppergrass. Fine flavor, and the best sort for dry soil. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Erfurt Water Cress. A most desirable and appetizing salad, thriving best in shallow water on the edge of streams. Pkt., 10c; $\frac{1}{4}$ oz., 30c; oz., 50c.

EGG PLANT

One ounce of seed will produce about 2,000 plants.

SEED is of slow germination and requires a moderate amount of heat. Should be started in hotbeds and not checked after starting to grow. When 2 or 3 inches high they should be potted in 3-inch pots and not set out in the open until nights are warm. Plant about 3 feet apart and keep well watered.

Black Beauty. This new variety is an excellent market sort. It is about the same size and shape as the New York Improved, except a little fuller at the top; is a few days earlier and a heavier yielder. Its color is a rich purplish black, which it retains even after becoming ripe.

Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

New York Improved. A leading market variety.

Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.



ENDIVE

One ounce of seed to 300 feet of row.

ONE of the best and most wholesome salads for fall and winter use. Sow in shallow drills in April for early use, or for late use in June or July. When 2 or 3 inches high, transplant into good ground, or thin out to one foot apart. When nearly full grown, they must be blanched. This is done by gathering the leaves together, and tying with yarn or bass, to exclude the light and air from the inner leaves, which must be done when quite dry or they will rot.

Broad-Leaved Batavian. Leaves broad, light green, nearly plain; used in stews and soups.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c.

Green Curled. Very hardy, crisp and tender.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c.

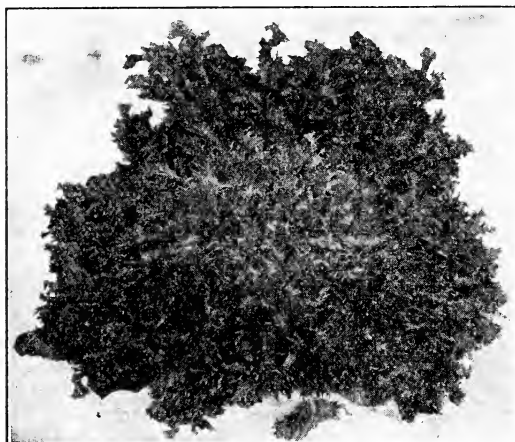
Moss Curled. It is excellent for winter use.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c.

White Curled. Coarser than Green Curled, but the midrib is yellow and the leaves frequently almost white.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c.

French Endive. (Witloof Chicory.) See Chicory.



Endive

GARLIC

PLANT same as Onions in rows 8 to 12 inches apart; set bulbs 4 inches apart in the rows, covering 2 inches deep.

Bulbs..... $\frac{1}{4}$ lb., 20c; per lb., 50c

HERB SEEDS

SOW early in April or May in a sheltered, well-prepared spot in the open ground, either broadcast or in shallow drills about 7 inches apart. Thin out the plants thus raised and keep clear from weeds.

Anise. Biennial. Pkt., 10c; oz., 20c.

Balm, Sweet. Perennial, 1 foot. Pkt., 10c; oz., 25c.

Basil, Sweet. Annual, 1 foot. Pkt., 10c; oz., 25c.

Caraway. Perennial, 2 feet. Pkt., 10c; oz., 20c.

Dill. Biennial, 3 feet. Pkt., 10c; oz., 20c.

Fennel, Sweet. Perennial, 6 feet. Pkt., 10c; oz., 20c.

Horehound. Perennial, 2 feet. Pkt., 10c; oz., 25c.

Hyssop. Perennial, 3 feet. Pkt., 10c; oz., 25c.

Lavender. Perennial, 2 feet. Pkt., 10c; oz., 40c.

Rosemary. Perennial, 4 feet. Pkt., 10c; oz., 40c.

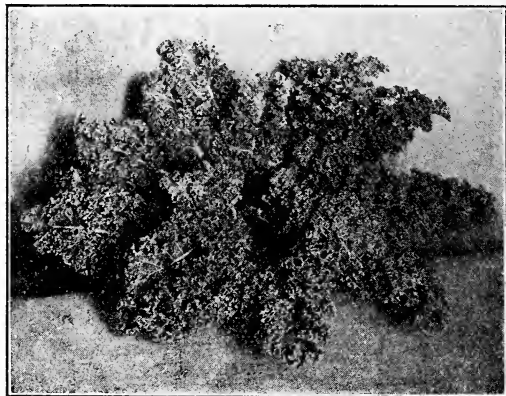
Saffron. Annual, 3 feet. Pkt., 10c; oz., 25c.

Sage. Annual, 1 foot. Pkt., 10c; oz., 40c.

Summer Savory. Pkt., 10c; oz., 40c.

Sweet Marjoram. Pkt., 10c; oz., 40c.

Thyme. Annual, 1 foot. Pkt., 10c; oz., 40c.



Kale or Borecole

KALE OR BORECOLE

One ounce to 500 feet of row—4 pounds to an acre.

THE Kales are more hardy than Cabbage, make excellent greens for winter and spring use, and are improved by frost. Sow from May to June, and cultivate the same as Cabbage. For early spring use, sow in September, and protect during the winter.

McCullough's Special. A beautiful curled and crimped variety of strong vigorous habit, perfectly hardy, bright green color and very attractive in appearance.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; per lb., 85c.

Norwood Dwarf Curled. A beautiful curled and crimped sort, of strong, vigorous habit, attractive appearance and a bright green color. It is superior to all other sorts, and is undoubtedly the best for private gardens. It rarely exceeds 12 inches in height, but spreads out under good cultivation to 2 feet in diameter.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; per lb., 85c.

Dwarf Curled Siberian. Leaves yellowish-green, finely curled. Sow in September for early winter and spring use.....

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Tall Scotch. Leaves green, beautifully curled and wrinkled—grows about 2 feet in height; hardy, being improved by frost.....

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; per lb., 85c.

KOHL-RABI (Turnip Rooted Cabbage)

One ounce of seed to 400 feet of row.

FOR an early crop, start in a hotbed and treat the same as early cabbage. May also be sown as soon as the ground can be worked in spring. For winter use, sow in the middle of June.

The edible part is the bulb, which grows on a stalk a few inches above the ground.

Early White Vienna. The flesh is white and tender.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 55c.

Early Purple Vienna. Differs from the above in color.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 55c.

LEEK

SOW early in April, in drills one foot apart, one inch deep. When the plants are six to eight inches high, transplant in a deep, rich soil in rows twelve inches apart and six inches in the rows, as deep as possible, so that the neck may be covered and blanched. Draw the earth to them as they grow. The seed may also be sown in September, and the young plants transplanted in the spring.

Large American Flag. This is by far the best variety. It grows to a good size and is wonderfully uniform.

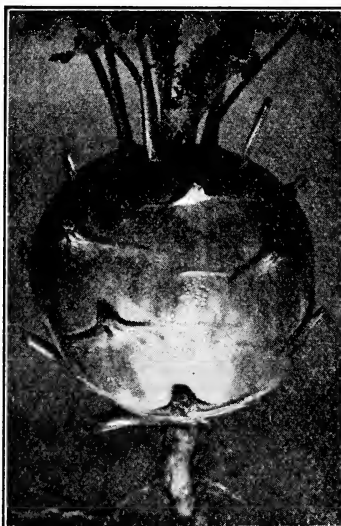
Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 65c.

London Flag. An old and popular sort; one of the hardiest; best for winter use.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 65c.

Large Musselburgh. Of enormous size; leaves large and broad; very mild, pleasant flavor.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 65c.



Kohl-Rabi

LETTUCE

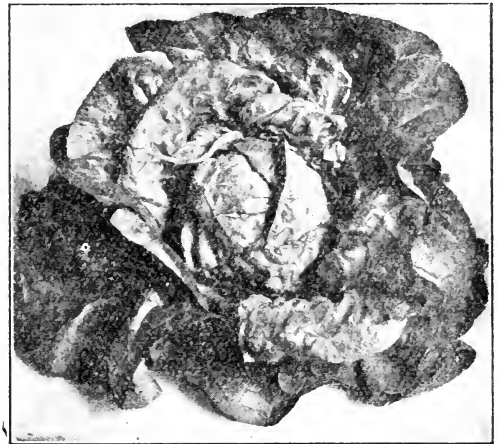
One ounce will produce about 5,000 plants.

SOW the seed in hotbeds or flats during February or early March, prick the young seedlings out in flats or cold frame 4 inches apart each way, and in spring, transplant the well-hardened plants in rows a foot apart, allowing 8 to 12 inches space between the plants in the row. For succession, sow seed thinly in open ground, and thin the plants to 5 or more inches apart. Sow for succession every few weeks until fall.

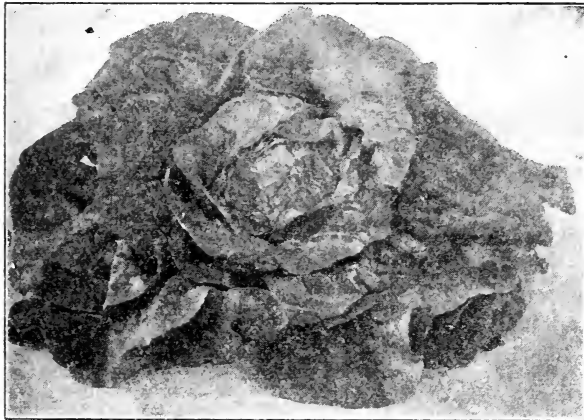
Head Varieties

McCullough's Selected Nonpareil The finest home garden and market variety. Its beautiful yellowish-green color, crimped, curled and well formed heads, tender quality and sweet flavor, place it at the head of the list for the market gardener or family use. It withstands the heat of summer and retains its sweetness for a long time. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Iceberg. A large, late, crisp Cabbage-heading variety; heads firm and hard, leaves broad and light green in color, with faint brown tracing on the borders. Quality good. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.



Wayahead



Big Boston

Big Boston. Heads solid with broad leaves; the best for outdoor or for forcing. Color light green. We have made a specialty of this variety and have a stock that can not be surpassed.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

May King. An early, fine variety for spring and fall use in the open ground, also for growing in cold frames during the winter months. The heads are 6 to 7 inches in diameter, with light green outer leaves. The inner leaves are blanched to a golden yellow.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

New York or Los Angeles. Plants of extra large growth, producing closely folded heads of immense size. The inner portion is beautifully blanched; outer leaves a deep, rich green.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Wayahead. It is not only earlier than May King, and other fine early varieties, but the tightly folded heads are generally larger in size. The outer leaves are a light green, with the inner head finely blanched to a rich buttery yellow.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Hanson. Heads green with white heart. Large size, crisp, tender. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c

Curled Varieties

Grand Rapids. This is probably the best of the loose-leaved varieties. It never forms a head, but produces an abundant crop of pale green leaves, slightly but closely crumpled, which, even when old, retain their characteristic tenderness and brittle character. We strongly urge those who cannot succeed in getting lettuce to head to grow Grand Rapids.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

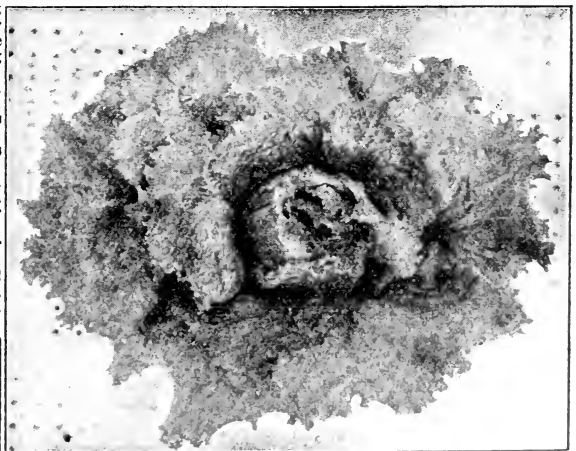
Black Seeded Simpson. One of the most popular sorts. It forms large, loose leaves of ideal color; the leaves are large, thin, very tender and of very good quality. It is one of the best sorts for use under glass as well as for early outdoor planting.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Early Curled Simpson. Does not head, but forms a close, compact mass of leaves; very early; excellent for forcing. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Early Curled Silesian. Early, loose heads, curled, tender and fine flavor. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Prize Head. Produces large, loose heads, finely crimped and fringed leaves, outer portions shaded brown; crisp, sweet and tender. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.



Grand Rapids

ORDER McCULLOUGH'S "PROFIT SHARING BACK YARD" COLLECTION 30 (Regular Size) Packets of Vegetable Seeds, \$2.00.

Illustrated on page 100.

Romaine, Cos, or Celery Lettuce

THESE are distinct from the ordinary Lettuce, and much liked on account of their crisp, tender quality and delicate flavor. They produce long, narrow leaves, which are blanched by drawing in the outer leaves and tying.

Paris White Cos. One of the best varieties for blanching; very tender. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Trianan Self-Folding. A self-blanching Cos Lettuce, very crisp and tender, and of excellent flavor.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

MUSK MELONS

One ounce will plant about 50 hills;
2 to 3 pounds in hills per acre.

IN selecting a patch for melons be careful to have it at a safe distance from your Squashes, Cucumbers, Pumpkins, etc., or they will certainly mix. In preparing the hills, fork in plenty of manure, and about the middle of May, when the ground is warm, plant in each hill eight or ten seeds, and cover half an inch deep. After the danger from bugs is over, pull all but three or four of the strongest plants. As soon as the vines have run sufficiently and spread their branches—stop them by pinching the top off the first running bud. This will strengthen the plants and promote their perfecting fruit early. The ground should be kept free from weeds and frequently cultivated.

Acme. Medium size, oval, slightly pointed at end, ribbed, covered when ripe, with coarse netting. Flesh thick, green, very fine flavored and sweet.
Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Banana. A long, smooth-skinned variety, growing something in the shape of long squash. Fruit about 12 inches long; salmon flesh, which is very sweet, luscious and tender.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Burrell Gem. Oblong in shape, smoothly rounded ends, closely netted and slightly ribbed, dark green skin. Rind thin, but very tough; flesh exceptionally deep, rich salmon-orange color. Fruit averages 6 inches long by 4 inches deep.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Defender. Medium size, salmon flesh, and delicious flavor; oval shape, slightly ribbed and covered with a slight netting.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Delicious. The shape is slightly oval and heavily netted over the entire surface. The flesh is as thick at the bloom end as elsewhere, and the flesh of the entire Melon is noticeably thick, fine grained and sweet. The color is green with a gold margin next to the seed cavity.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Emerald Gem. Ripens early; medium size; nearly round; flesh a delicate salmon color, very thick, fine grained, and superb flavor. The rind is thin dark green, ribbed, slightly netted.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Extra Early Hackensack. Produces melons two weeks earlier than the well-known Hackensack; heavily netted, and has light green flesh of most delicious flavor; a splendid Melon.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Golden Champlain. The extreme earliness of the Golden Champlain, which has made a record of ripening melons in 57 days from planting seed in the open field, puts it ahead of all others in this respect. It is only a short time after the melons attain full size until they are ripe. The flesh is of a very rich golden color, very thick, fine and of delicious flavor clear to the rind. It is covered on the outside with a heavy gray netting, over a dark green skin. The size averages from two to three pounds in weight, is nearly round, and slightly ribbed.
Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Hackensack. Melons grow to large size and attractive appearance. Flesh green, very sweet and sugary. Outer skin is heavily netted.
Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Hales Best. (Early Imperial.) This melon is an early and heavy yielder. Flesh firm, salmon tint in color; rind is well netted and attractive. Seed cavity is very small.
Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Hearts of Gold. Just the right size to cut in halves and serve alone or with Ice Cream. Flesh is deep orange, extremely thick, fine grained and as sweet as honey. Always free from stringiness; closely netted, very solid, almost blight-proof...Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Honey Ball. This melon is one of the most prolific early varieties grown. It is as round as a ball and has a very thick wall of delicious green meat clear to the rind. The seed cavity is small, rind is tough and consequently is a good shipping melon. Its color is greenish white until it is fully ripe, when it turns a creamy white or bright yellow, slightly netted. It has a high sugar content and a delicious flavor. For home use, the melons should be pulled when apparently ripe and stored away for a few days before using.
Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.



Golden Champlain

Honey Dew. Average size is about six to eight inches in diameter, and they weigh five or six pounds. Skin smooth with little netting, and of creamy yellow color when ripe. Flesh is green, thick, melting, fine grained and can be eaten almost to the rind. Not easily bruised, and stands shipping long distances. Easily pulled when ripe and will keep for several weeks. Matures about ten days later than the Rocky Ford.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Improved Green Nutmeg. A large melon, nearly round, deeply ribbed; flesh thick, light green, delicious flavor.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Ohio Sugar. The flesh is an attractive green of fine texture, sugary, juicy, tender and free from stringiness. It is round, inclined to oval, distinctly ribbed, and thickly netted. Because of its firm flesh and solidity, it is a splendid shipper...Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Osage, or Miller's Cream. A favorite salmon-fleshed variety. Large oval, slightly ribbed and netted; skin is very dark green. Flesh is very thick and sweet flavored, most delicious to the rind.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Rocky Ford. The reasons for the widespread popularity of these melons are their superb table and wonderful shipping qualities which enable them to be carried great distances, and yet arrive in first-class condition for market. The fruit is of medium size, oval shaped, heavily netted and very solid. The flesh is green, thick and juicy. It is early and wonderfully productive.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Tip-Top. A medium sized Muskmelon, nearly round in shape, with shallow netting on skin. The flesh is deep yellow and has a rich flavor. The constantly increasing demand for our strain of Tip-Top Melon Seed permanently establishes its superiority.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

MUSTARD

One ounce will sow 100 feet of drill.

A SMALL, pungent salad used like Cress. The seed is also used for flavoring pickles, pepper sauce, etc. For salads sow thickly in shallow drills, 6 inches apart, or in frames or boxes during the winter, where frost can be partially excluded. Successive sowings can be made every week or two. To grow seed, sow in April, in rows 1 foot apart, and thin out to 3 inches apart when 2 inches high.

White English. Best for salads.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c.

Chinese, or Giant Southern Curled. The large leaves, which often measure 14 inches, are ready for use in about six weeks after sowing. Leaves are eaten boiled like Spinach.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c.

WATERMELONS

One ounce for 15 hills—4 to 5 pounds for an acre.

WHILE a sandy loam is preferable for Watermelons they can be grown on a loamy soil having a clay subsoil, provided it is deeply plowed. When ground is warm, plant 6 to 8 seeds in hills 6 to 10 feet apart each way and cover about 1 inch deep. When well up, thin out to 2 vines in each hill. Do not plant on land where Watermelons were grown before, as the vines exhaust elements in the soil which makes succeeding crops defective.

Watermelons are slightly less subject to "bug" depredations and disease attacks than Muskmelons. At the same time they are more easily hurt by strong spray mixtures, and caution in the use of such mixtures is advisable.

Cole's Early. A very early variety. Large heart, flesh of fine texture and good flavor. Rind thin. Fine for the home garden. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Dark Icing, or Ice Rind. A very solid sort with a thin rind, and possesses most delicious flavor.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Excel Improved. Will produce more large, marketable melons under the same conditions than any of the other sorts of the long variety, and its carrying and keeping qualities are unsurpassed. Fruit oblong in shape, dark green color with tracings of light green. Flesh deep red, crisp and tender. Weight, 35 to 60 pounds.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Gray Monarch. Large size; long in shape; the skin is a mottled gray; flesh bright crimson and of sweet, delicious flavor.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Florida Favorite. Oblong in shape, growing to large size; rind dark, with light green stripes; flesh light crimson, crisp and deliciously sweet.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Fordhook Early. The fruit is of good size, rather short and blocky in form, with large diameter. Skin dark green, occasionally with faint stripes of lighter green. Rind quite thin, but skin tough, making an excellent shipping variety. Flesh bright red, crisp, sweet, and of splendid quality.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Halbert Honey. A very sweet, long, dark green variety. Fruit averages 18 to 20 inches long, has a thin rind and deep red meat of delightfully delicious flavor; seeds white. One of the finest for the home garden.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

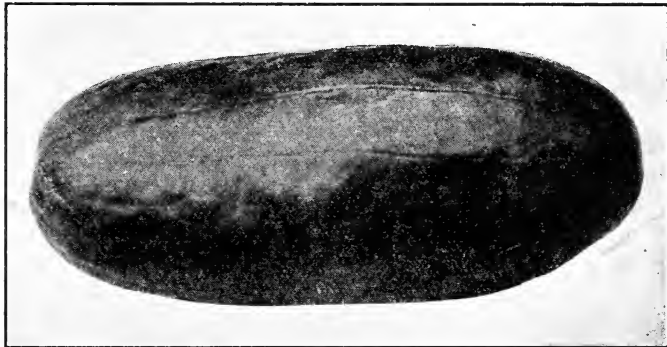
Irish Grey. The size is uniform and large. Color of rind yellowish-gray and almost as tough as that of the Citron. Ripens earlier than Watson and will keep in good condition for a long time after picking. Very prolific and a good shipper. A fine market sort.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Kleckley's Improved. This improved type grows uniformly large, retaining all the fine qualities as a table melon, with an important added feature of having much harder rind, which assures its satisfactory carrying qualities for long distances. Color of rind is dark bluish green and grows to a much larger size than the old type. . . . Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

Long Light Icing. The skin is a mottled gray color, shape long, flesh bright crimson and sweet.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.



Kleckley's Improved

Peerless, or Ice Cream. Of medium size; skin light mottled green; flesh scarlet.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Rattlesnake, or Gypsy. Fruit large, oblong, striped; flesh red. . . . Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Ribault. This new melon is long and thick in shape, measuring 24 to 30 inches long by 16 to 20 inches in diameter. The rind is dark green, indistinctly striped, medium thick and will stand rough usage during shipping. The meat is red and sweet and free from hard centers. . . . Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

Stone Mountain. (Dixie Bell.) A new introduction of best quality, and is claimed to be the sweetest of all the large melons in shape it is almost round, dark green rind, medium thick, flesh rich scarlet, not unusual to grow Stone Mountain weighing 70 to 80 pounds; for home and nearby markets it is unexcelled, seed white with black tips; time for ripening, 90 days.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.

Tom Watson. An extra long melon of attractive appearance, uniform in shape and quality. The luscious crimson flesh is "as sweet as honey" and of superb flavor. The average melon will weigh 30 to 40 pounds and measure about 28 inches long and about 12 inches in diameter. It is very prolific.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

Sweetheart. Flesh bright red, solid, and tender.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., 85c.

MUSHROOM SPAWN

One pound of Spawn is sufficient for a bed 2 x 6 feet.

MUSHROOMS can be successfully and profitably grown during the winter and spring months in frames, under greenhouse benches, in the open fields, or in cellars or out-houses.

We supply many of the largest commercial growers in the United States and have on hand at all times in the season fresh Spawn of the best manufacture.

American Made Pure Culture Mushroom Spawn. A very superior article, made in this country from carefully selected spawn, which it is claimed is much more vigorous than the imported article, and will produce mushrooms of a very superior quality and flavor. The popularity of Pure Culture Spawn is increasing rapidly and many of the large growers are now using it. They claim it is a surer crop. Amateurs have much the best results with this kind. By express—customer to pay charges. Per brick, 25c; 5 bricks, \$1.15; 100 bricks, \$20.00. By mail, 30c per brick; 5 bricks, \$1.40 postpaid.

The most practical work on the subject; \$1.25.

Mushroom Culture. (Wm. Falconer.) Treatise on Mushroom Culture. 10c, or given with an order of 10 lbs. of Mushroom Spawn.

Special Prices will be given to those who use Mushroom Spawn in quantity.



OKRA, OR GUMBO

One ounce of seed for 300 plants.

THIS vegetable is extensively grown for its green pods, which are used in soups, stews, etc., to which they impart a rich flavor, and are considered nutritious. Sow the seed thickly in rich ground, about the middle of May, or when the ground has become warm, in drills 3 feet apart, 1 inch deep; thin to 12 inches apart in drills. Culture otherwise much like Corn.

Perkins Mammoth. The pods grow 4 to 5 inches in length and are very tender, long, slim and deep green; plant is dwarf, and very productive.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c.

White Velvet. Pods are round, smooth, velvety white; of superior flavor and tenderness. Plants dwarf, very prolific.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c.

Dwarf Green. The best of the dwarf sorts. It makes a stocky growth of plant and is very productive. The pods are long, slender and of a light green color.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c.

Long Green. Taller than the preceding, bearing long, ridged pods. Highly esteemed in the South.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c.



Okra or Gumbo

ONION SEED

FOR sets, drill the seed thickly as early as possible in the Spring. As soon as the tops dry off in the Summer, remove to a dry, airy place. May also be grown to full size the first season by sowing thinly in drills one foot apart and one-quarter inch deep, in March or early April, thinning to three or four inches apart.

By sowing in frames in February or March and transplanting in April, onions of immense size can be obtained. For this purpose the Southport White Globe and Prizetaker are usually preferred. Onions delight in a strong, rich, deep loamy soil, and succeed well if grown successive years on the same ground.

One ounce for 150 feet of drill, 5 to 6 pounds for one acre. Onion seed for sets, 30 to 40 pounds per acre.

Prosperity. The Prosperity Onion will make more money for the gardener than any other crop. It can be marketed long before onions from spring planted sets are ready and thereafter throughout the whole season even in the hottest of weather up to the time when the ground freezes up solidly. Prosperity Onion forms no bulbs, is a bunching onion like the Welsh or Egyptian Winter, but very much better. The stalks are extra heavy, $\frac{1}{2}$ to $\frac{3}{4}$ inch through, absolutely white for a length of 4 to 6 inches, tender, mild and sweet, fully equal in quality to onions raised from sets, of better appearance and easier to get ready for tying, no skin to peel, all that is needed is to wash the stalks and tie. It is raised from seed. You plant it only once and for years thereafter all you will do is to pull, leaving a stalk stand in the row five inches apart and this stalk by stooling soon will furnish another crop. Thus a bed of Prosperity Onion becomes a permanent crop, yielding from year to year, every day in the year excepting in winter when the ground is frozen and covered with snow. It is absolutely hardy, needs no covering of any kind, no protection whatever, it never winter kills.

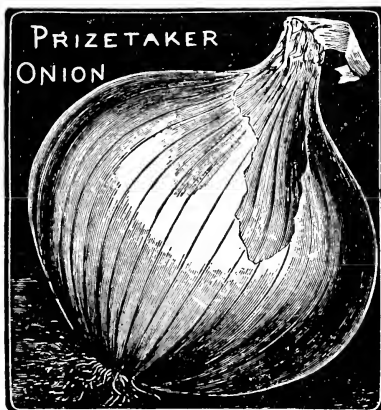
Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Yellow Globe Danvers. A standard sort; an excellent keeper and very productive. Our strain of this variety is the true globe shape, and not of the flat type. It is the best paying onion that is grown for general crop, and has been the leading variety for years.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Ohio Yellow Globe. Sure cropper; long keeper; early. This fine strain is of that extreme type of Globe now so deservedly popular in all large Onion markets. Its main points of excellence are: Distinct and attractive shape; handsome, bright, even color; necks very small; ripens early and all at once. The solid bulbs are excellent winter keepers, and all that can be desired in size and quality.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.



PRIZETAKER
ONION

Prizetaker. The true Prizetaker is globe shape, has pale yellow skin and white flesh, which is very mild and of delicate flavor. It is strictly "fancy", and will be found on fruit stands during the fall, where it is sold as Spanish Onion. No sets are required, as the large Onions are grown the first year from seed sown during early spring.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Ebenezer (Japanese). This is the mildest yellow Onion in our list. The Onions are large, somewhat flattened, have attractive yellow skin and firm white flesh of delicate flavor; very small top and ripens quite early for so large a variety. One of the best keeping sorts. Sets of the Ebenezer keep almost indefinitely.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Yellow Danvers. Bulb of good size and flat, the standard yellow onion for market or home use, being both early and an enormous yielder as well as good keeper.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Yellow Dutch, or Strasburg. A good keeper and well flavored; bright straw colored skin and somewhat flattened shape. The Onions grow to a good size and are very mild. This variety is largely grown for sets.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Large Red Wethersfield. Grows to full size the first season from seed. The Onions are large, flat in shape, with skin of a purplish-red color and flesh of a purplish-white color, rather strong-flavored; an excellent keeper.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Southport Red Globe. Beautiful globe-shaped; of medium size, a good keeper and of superior quality. Very popular in some sections.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

White Portugal, or Silver Skin. This variety is one of the leading white sorts. The bulbs are flat in shape and mature early. Largely used for growing sets.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Southport White Globe. Pure white color, mild flavor. A good keeper and very productive. It is best to dry these Onions in a shady place, where they will get plenty of air.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Mammoth Silver King. A large, flat variety. Specimens have been grown to weigh as high as 4 pounds. Skin pure white and flesh tender.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

White Queen. A rapid-growing variety of mild flavor; pure white, and splendid for pickling.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

White Barletta. An extra early small white Onion; similar to White Queen.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Early White Bunch. Used largely for pulling when young, as a bunch Onion. If left to mature, grows to good size; very showy. Pearly white skin. Flesh of good quality and a good keeper.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

ONION SETS

Onion Sets should be planted out as early in the Spring as the ground is dry enough to work; plant them in rows 12 inches apart, with sets 2 inches apart in the row. We handle sets of the standard varieties. Prices subject to market changes.

Lowest market price will be given upon application.

PARSNIP

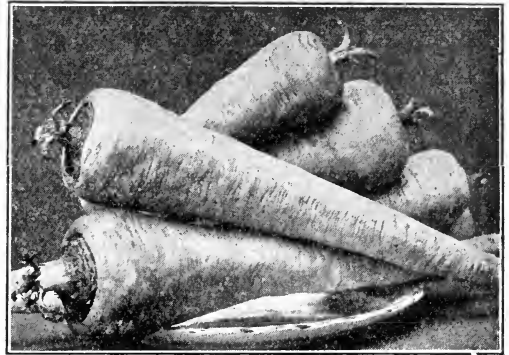
One ounce for 200 feet of drill.
4 to 5 pounds for an acre.

SOW seed early in spring, in deep, rich soil in drills. Scatter the seeds thinly and cover evenly with a rake. After the appearance of the plant, the soil must be stirred frequently until the leaves cover the ground. The seed is slow to germinate, and is frequently a long time in coming up; will vegetate sooner by steeping 6 to 12 hours in a liquid manure, diluted with water and mixed with sand before sowing. When well up, thin out to 5 to 6 inches apart in the rows. Unlike Carrots, they are improved by frost, and it is usual to take up in fall a certain quantity for winter use, leaving the rest in the ground until spring, to be dug as required.

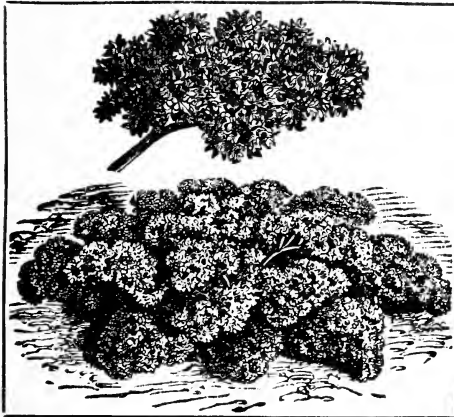
Large Sugar, or Hollow Crown. The best variety: roots long, very smooth, white, tender, sugary and of excellent flavor. This strain was made by careful selection of roots growing to an ideal shape and having the distinct hollow crown.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c.

Student, or Guernsey. A good half-long variety, smooth, sweet and of delicate flavor..Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c.



Large Sugar, or Hollow Crown



Norwood

PARSLEY

One ounce to 200 feet of drill.

SOW thickly early in April, in rows one foot apart and one-half inch deep; thin out the plants to stand six inches apart in the rows.

The seed is of slow germination, taking from three to four weeks to make its appearance, and often failing to come up in dry weather. To assist its coming up quicker, soak the seed a few hours in warm water, or sprout in damp earth, and sow when it swells or bursts. For winter use, protect in frame or light cellar.

Norwood. Fine curled leaves of rich, dark green, compact growth; finest quality.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Extra Double Curled. Beautifully crimped and curled.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Moss Curled. Fine for garnishing..Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Plain. A hardy variety having dark green leaves which are not curled. It is a little stronger in taste and much esteemed for flavoring soups and stews, as well as for drying.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

Hamburg Turnip Rooted. The fleshy root resembles a parsnip and is used for flavoring soup, stews, etc.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c.

PEPPER

One ounce of seed for 1,500 plants.

SOW early in the spring in hotbeds, if possible, and transplant to the open ground when the weather is favorable, or sow in drills in warm, mellow soil late in the spring, and then thin out so as to stand 18 inches apart.

California Wonder. Resembles Chinese Giant in shape, but has much thicker flesh. The fruit will average 4 inches in diameter at the top, tapering slightly. It matures its fruit somewhat earlier than Chinese Giant and is very prolific. Color glossy dark green, turning to crimson.

Pkt., 10c; oz., 60c; $\frac{1}{4}$ lb., \$2.00.

Cayenne Long Red. From 3 to 4 inches long, bright red color, very productive and hot.....Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Celestial. Fruit conical in shape, one to two inches long; green from the blossom, turning alternately to lemon, golden and scarlet.

Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Chinese Giant. Flesh is thick, mild and very sweet. Largest pepper grown.....Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Early Giant. The peppers are of medium size, $3\frac{1}{2}$ to 4 inches high and 2 $\frac{1}{2}$ to 3 inches in diameter. The plants grow 12 to 18 inches high, and usually produce so many peppers that they hardly seem able to support them. Will produce three times as many peppers as any other sweet kind and they mature much earlier.....Pkt., 10c; oz., 60c; $\frac{1}{4}$ lb., \$2.00.

Golden Dawn. Of same shape and size as Large Bell, but of more delicate flavor; color yellow.....Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.50.

Large Bell, or Bull Nose. Large and early; rind very thick; color glossy red; flavor mild and pleasant.....Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Pimento. The fruit is of good size, medium length and attractive color. The flesh is thick and solid, mild and of fine flavor. Desirable for salads and stuffed peppers. The plants are vigorous and upright, about two to two and one-half feet high, with short, broad, dark green leaves. The fruit is deep green when young, becoming deep red as it matures.

Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Red Chili or Small Cayenne. Pods $1\frac{1}{2}$ to 2 inches long, very hot; used for making pepper sauce.

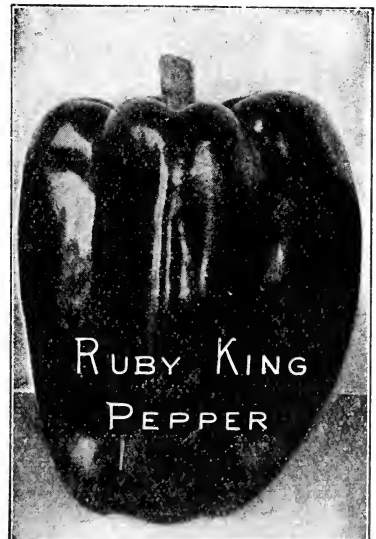
Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Ruby Giant. A cross between the Chinese Giant and Ruby King. The fruits are quite early, averaging $4\frac{1}{2}$ inches long and $3\frac{1}{2}$ to 4 inches wide at the thick end, of shape similar to Chinese Giant but far more uniform and more handsome. The flesh is very thick with comparatively few seeds, and mild. Color a beautiful deep green when young; brilliant ruby-scarlet when ripe.....Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Ruby King. Large size, ruby red pods; flesh exceedingly thick; sweet and mild.....Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Sweet Mountain. Similar in shape to the Bell, but grows larger; rind thick, tender and fleshy.

Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.



GARDEN PEAS

One pound will plant about 50 feet of drill—90 to 120 pounds per acre.

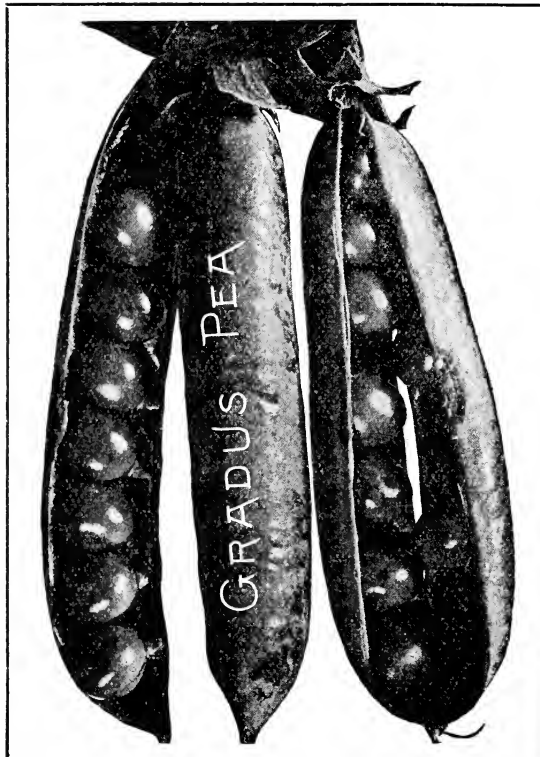
PEA S succeed best in light, dry, loamy soil. Early and Dwarf sorts require richer soil than the late varieties. If manure is used, let it be old and well rotted, or there will be a rank growth of vines with few pods. Sow the early, smooth, round sorts as early in spring as the ground can be worked. Seeds of wrinkled varieties are more liable to rot if the ground is cold, and must be planted later. From the first sowing, sow every two weeks until June for a succession. After that there is danger of mildew. Discontinue then until August, when a planting of extra early or early sorts will often produce a good crop. Sow these in single drills, three feet apart for dwarf sorts and four for tall sorts, or in double drills six or eight inches apart, one inch apart in the drill, and not less than four inches deep, since deep planting prevents mildew and prolongs the season. Cultivate well, and draw the earth twice to the vines during growth. Stake the tall varieties when they begin to vine. Pick the pods as soon as fit, and allow none to ripen on the vines, as they will then cease bearing. All kinds of Peas do best when supported with brush or wire.

All varieties of Peas, pkt., 10c., postpaid; for larger quantities by mail, see "Postage," 2nd page of cover.

Early Varieties

McCullough's "Maud S" The earliest and most prolific Pea known. The pod is of a dark green color, of a full, round shape, and of strong texture, which especially fits it for shipping long distances. For a late fall crop it has few equals, and is the market gardener's favorite for all seasons. The far northern point at which our Peas are grown renders them almost proof against cold, and the best for early spring or late fall crop. Thousands of market gardeners have pronounced this Pea unequaled in earliness, yield and regularity of growth. Make first planting as early in the spring as the ground will permit and cover well.
Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 5 lbs., \$1.20; 15 lbs., \$3.00.

Alaska. A wonderful early, smooth, blue Pea; vines slender; pods very dark green, about three inches long, well filled with small, smooth blue-green peas. The earliness, uniformity in ripening and deep color render it a desirable market and canning pea; height 2 feet.
Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 5 lbs., \$1.20; 15 lbs., \$3.00.



Laxtonian. The pods of Laxtonian are very large, and are produced on a low-growing, sturdy vine, without support of any kind. The flavor is just as rich and good as any of the later varieties. It is ready for use about a week later than the very early sorts, and is incomparably good in quality. Pods and plant are rich, dark green in color.
Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 5 lbs., \$1.20; 15 lbs., \$3.00.

Little Marvel. As early as American Wonder and Nott's Excelsior, the pods are larger and the vines produce a heavier crop. For quality and productiveness it is far ahead of everything in the way of extra early wrinkled peas. It is dwarf, growing about 15 inches high, and the plants are very productive, bearing many twin pods, which are dark green in color.
Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 5 lbs., \$1.20; 15 lbs., \$3.00.

American Wonder. This variety stands unrivaled in point of flavor and quality. It is dwarf and robust in habit, growing from 10 to 15 inches in height according to soil.
Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 5 lbs., \$1.20; 15 lbs., \$3.00.

Nott's Excelsior. A dwarf wrinkled Pea of the highest excellence. The pods average three inches in length and are well filled with peas of large size and unusually sweet flavor; height one and one-fourth feet.
Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 5 lbs., \$1.20; 15 lbs., \$3.00.

Premium Gem. An improved Little Gem Dwarf, green, wrinkled, very prolific, fine flavored, large pods, excellent either for market or home use; height, one and one-half feet.
Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 5 lbs., \$1.20; 15 lbs., \$3.00.

Gradus or Prosperity. This remarkable Pea is not only large and of the best quality, but is within two or three days as early as the small, round, extra early sorts. Gradus is a wrinkled Pea, growing about 30 inches high; the pods are of a bright green color, measuring 4 inches or more in length, as large as Telephone, well filled with luscious peas, 8 or more in a pod. The peas are of the highest table quality and retain, in a remarkable manner, their color and attractive appearance after cooking. Make the earliest sowing in the warmest spot in the garden.
Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 5 lbs., \$1.20; 15 lbs., \$3.00.

Thomas Laxton. A cross between Gradus and one of the Extra early sorts. It ripens within a day or two of the earliest round varieties, and is extremely productive. The pods are very large and contain 7 or 8 large-sized wrinkled peas of the finest flavor. It is darker colored than the Gradus and harder in constitution; height, three feet.
Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 5 lbs., \$1.20; 15 lbs., \$3.00.

VIGORO
Complete plant food

GARDEN PEAS—Continued

All varieties of Peas, Pkt., 10c. postpaid; for larger quantities by mail, see "Postage" 2nd page of cover.

Second Early and Main Crop

Dwarf Telephone or Daisy.

A mid-season variety; vines dwarf and produce large, bright green pods containing peas of finest quality Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.20; 15 lbs., \$3.00.

Advancer.

This Pea is used very extensively by market gardeners on account of its productiveness, the fine appearance of its pods and its exceedingly fine flavor. It is a wrinkled variety, grows about two feet in height, but needs no brushing as it stands up very strong itself. Has broad, long pods, which are abundantly produced and well filled to the end. Pkt. 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.20; 15 lbs., \$3.00.

Admiral Dewey.

The largest podded Pea yet introduced. Height, 3½ feet; pods a rich, dark-green color, frequently 6 inches long, beautifully shaped. Peas large, tender and of fine flavor.

Alderman.

The vine is extra vigorous, and the pods of Alderman are dark green and always well filled with fine large peas. For a pea which should be staked there is none quite so good as Alderman. It is one of the finest of the large-podded summer varieties. The haulm grows five feet in height and is of a rich, dark green coloring, as are also the large pods. Pods frequently measure nearly six inches in length and contain from ten to twelve very large peas of superior flavor. Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.20; 15 lbs., \$3.00.

Telephone.

The favorite late variety; extra large pods. This Pea has proven to be a most valuable introduction. Vine large, leaves coarse, height about 4 feet. The pods are very large and filled with immense peas, which are largest of any. Tender, sweet and of splendid quality and flavor. A valuable feature of this variety is that it continues in bearing for an extremely long time. The stock we offer has been selected with every care, and will give satisfaction to the most exacting grower. Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.20; 15 lbs., \$3.00.

Improved Champion of England.

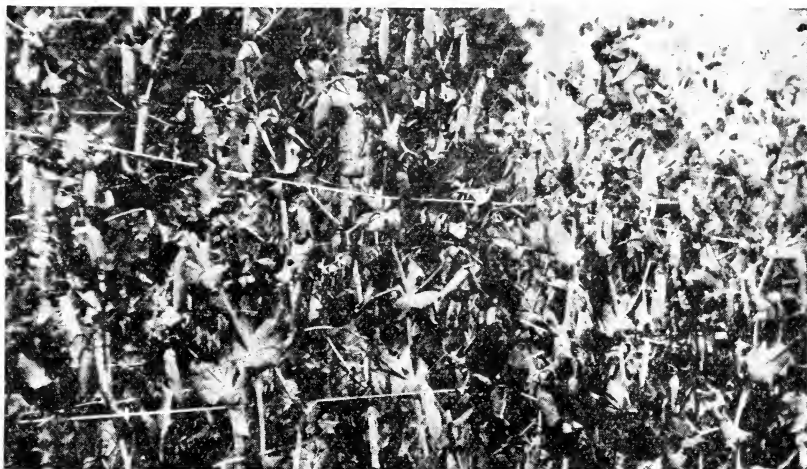
One of the best known of the older varieties; a tall-growing, green, wrinkled marrow; quality unsurpassed; pods medium; peas large. Five feet. Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.20; 15 lbs., \$3.00.

Dwarf Sugar.

Edible pods. Can be used in a green state like string beans. Height, five feet. Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.20; 15 lbs., \$3.00.

Mammoth Luscious Sugar.

This variety grows to a height of five feet and bears profusely, long, broad, light green pods. If picked when about half grown, broken and boiled like string beans and served with butter sauce, they make a luscious dish. Pkt., 10c; ½ lb., 20c; 1 lb., 30c; 5 lbs., \$1.20.



McCullough's Telephone Peas, grown by Mr. Lewis Crosley

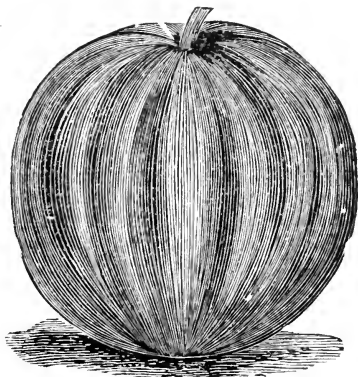
PEANUTS

Shell the nuts and plant in April or May in drills 2 to 2½ feet apart, dropping 2 seeds 12 to 15 inches apart in the drills. **Mammoth Virginia.** The most profitable variety to grow as a market crop. Erect stems and upright foliage with large pods and kernels. Pkt., 10c; ½ lb., 20c; per lb., 30c.

PUMPKIN

One ounce for 25 hills.

THEY are generally planted in cornfields, but they can not grow as large or fine as if the vines were not shaded. A good plan would be to plant a few seeds in the potato patch as they are less apt to be injured by the crop of potatoes than of corn.



Large Cheese

Cashaw Crook-Neck Striped. Grows to a medium size; flesh light yellow, and is the best variety for table use. Pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Golden Cashaw. Beautiful golden-orange color; an improvement on the old Cashaw. Pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Japanese Pie. Is very productive, ripens early, of medium size, good keeper, and weighs 15 to 20 pounds each. The flesh is a rich salmon color. Pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

King of Mammoth. The giant among pumpkins; specimens have been grown to weigh 60 pounds and reaching two feet or more in diameter; fruit round and flattened, slightly ribbed; skin salmon-orange, flesh bright yellow and very thick. Pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Small Sugar. Fruit of small size, averaging about ten inches in diameter, of excellent keeping qualities, flattened or slightly ribbed. Skin deep orange-yellow, flesh very sweet. This should be more generally grown, as it is really one of the best for pies. Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Tennessee Sweet Potato. Medium size, pear-shaped, a little ribbed, color creamy white, sometimes lightly striped with green. Pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.

Large Cheese. An excellent keeper, color bright orange. Pkt., 10c; oz., 15c; ¼ lb., 25c; per lb., 70c.

Connecticut Field. A large, yellow variety. Pkt., 10c; oz., 15c; ¼ lb., 25c; per lb., 75c.

Kentucky Field. Good for cooking purposes and for feeding stock. Pkt., 10c; oz., 15c; ¼ lb., 25c; per lb., 60c.

RADISH

One ounce to 100 feet of drill—8 to 10 pounds for an acre.

SOW early and often. In good, warm, fibrous loam; especially if quite sandy, summer Radishes will make a crop in 4 to 6 weeks from sowing. The soil should be well prepared, and fertilizers may be used freely. Have the rows a foot apart, and sow just seed enough so that they will not require thinning. Any little spot that becomes available during summer may be utilized for planting Radishes. The short or turnip-rooted sorts are quickest and easiest to grow, and good for forcing also. On greenhouse bench or in frames the rows need not be more than 4 inches apart. Sow winter Radishes in July and August. They grow best in the cooler Autumn weather. Take them up before severe freezing and store in sand in the cellar or in a pit, where they will keep tender and crisp all winter.

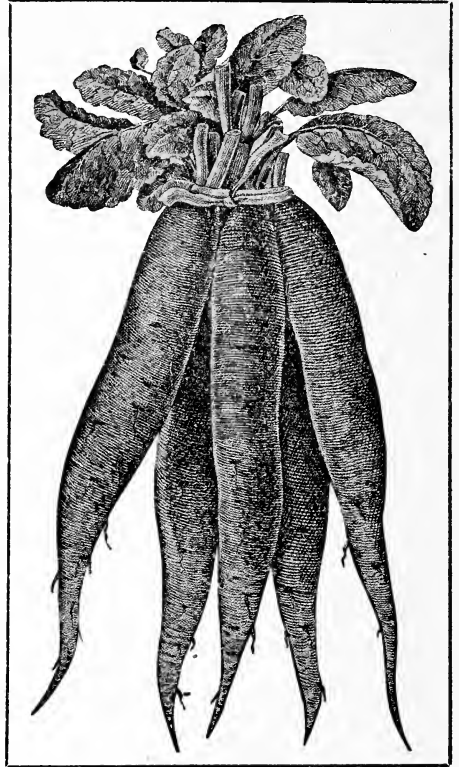
McCullough's Cincinnati Market. We were the introducers of this remarkable radish, which has proven one of the best long Radishes offered. The tops are so small that the radishes may stand touching each other in the rows. They grow perfectly straight and smooth and from six to seven inches in length. Their attractive, glossy, scarlet skin is very thin and the flesh crisp and brittle, and of delightful pungent flavor. It is the finest Long Red Radish for forcing and out-sells any other on the market. Being long standing, it is also an extra fine sort for the home garden, entirely exempt from any tendency to become pithy or hollow.
Extra Select Original Stock Seed. Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Crimson Giant. This variety is suitable both for forcing or early planting out of doors. A remarkable feature of this Radish is that it will grow double the size of other round red forcing Radishes and still remain solid. The ordinary forcing Radish, after growing to the size of 2 inches in circumference becomes pithy, while the Crimson Giant will grow to 6 inches in circumference, and still remain solid and juicy, free from all signs of becoming soft.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

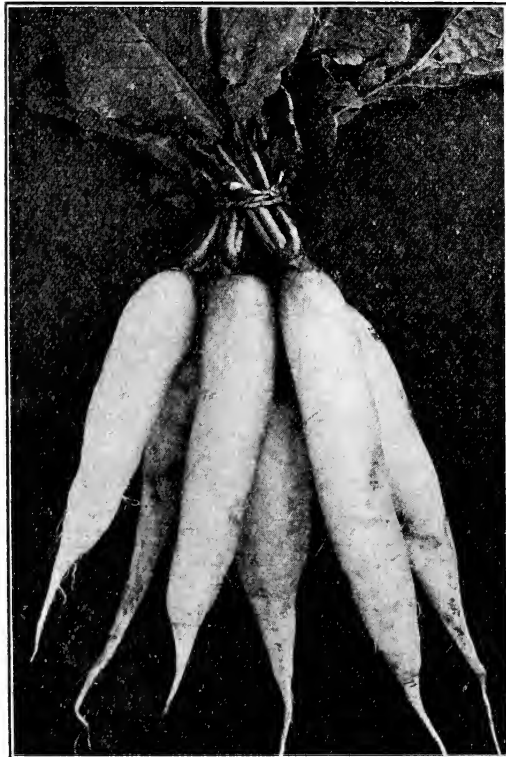
Non Plus Ultra. The smallest topped and earliest forcing Radish. Roots small, round; deep rich scarlet; very crisp and tender, white flesh. . . . Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Rosy Gem. We have a very clean and beautiful strain of this popular sort. It is extremely early, maturing in 25 days, and is largely used for growing both under glass and outdoors. It is round, bright scarlet and has a handsome white tip
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Earliest White Globe. The earliest white olive-shaped Radish in existence, beautiful, transparent ivory-white, very small root, small top; flesh white, tender and crisp. It is particularly adapted to forcing in greenhouse or hot-bed, also does well in open ground.
Pkt., 10c; oz., 15c; ¼ lb., 40c; per lb., \$1.25.



Cincinnati Market



White Icicle

Scarlet Globe. One of the earliest and best sorts for forcing; flavor mild; crisp and juicy; also good for garden culture.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Scarlet Turnip. A small top variety, of quick growth, mild and crisp. It is a standard sort for early planting in the open ground.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Scarlet Turnip, White Tipped. Bright scarlet color, gradually fading off to pure white at the base, tender and mild in flavor, early.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

White Turnip. An early, crisp, turnip-shaped Radish of pure white color.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

French Breakfast. A variety of quick growth, mild and tender, and one of the best for forcing. Oval form, scarlet, tipped with white.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Golden Globe. Perfect globe-shape, and golden-colored skin, quick growth, tender and brittle.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

McCullough's Norwood Long White. Fine long white Radish, with beautiful shape; skin and flesh, pure white.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Long Scarlet, Short Top. Long, of a deep scarlet color; flesh white; crisp and of good flavor.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

White Icicle. The finest long, white Radish; the young Radishes are ready for use in 25 days, and continue to grow, fully retaining their crisp tenderness and mild flavor until quite large. These Radishes are transparent white, have small tops, allowing close planting, and are very crisp and brittle. A feature greatly in its favor is that it remains in good condition while growing for a long time, thus allowing a continuous pulling from the same planting.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

White Strasburg. Oblong, tapering shape, skin and flesh pure white, firm and brittle; fine for winter use.
Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Chartier. Half-long, of quick growth; color deep pink above and gradually blending into a pure waxy white to root. . . . Pkt., 10c; oz., 15c; ¼ lb., 30c; per lb., \$1.00.

Radish—Winter Varieties

THESE grow to large size, have firm, hard flesh, and can be kept in good condition for use all winter by packing the roots in moist sand or soil in a cold cellar before the ground freezes in the fall. To have them crisp and free from woodiness the seed should not be planted until late in the summer, as if planted too early the roots would be apt to become hard and woody before it is time to put them away in the fall. A good rule to follow would be to sow the seed at the same time as you would plant seed for winter turnips, and where only a small supply is needed the seed should be sown in the same patch with the turnips.

Black Spanish, Oval Shape. A black valuable winter sort... Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.
Black Spanish Long. Differs from the above only in shape... Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.
Celestial. An all-season white Radish. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.
Chinese Scarlet. Half-long, fine winter sort, keeps well. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.
Mammoth White Winter. A giant white-fleshed fall Radish. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

R H U B A R B

One ounce will produce about 600 plants.

GOOD plants are easily grown in any good garden soil. Sow in April in drills 18 inches apart and cover the seed with fine soil, pressing it down firmly. When the plants are strong enough, thin out to 6 inches. Keep soil loose and free from weeds. In fall or spring following, transplant to the permanent bed, 4 feet apart each way, in deep, warm and very rich soil. The more manure the better stalks.

Linnaeus. Best sort for general purposes; early, large and tender..... Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

Victoria. Very large; later than Linnaeus.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

For Rhubarb Roots, see Vegetable Plants.

S A L S I F Y OR VEGETABLE OYSTER

One Ounce Will Sow 200 Feet of Drill.

COMMONLY called Vegetable Oyster. The cultivation is precisely the same as directed for Parsnips, and it will keep over winter, in the ground where grown, in the same way as Parsnips, but should be taken up before it starts growing in spring.

Long White French. Roots of medium size, white and smooth. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Mammoth Sandwich Island. This variety will average nearly double the size of the White French, and is of excellent quality. The best variety for market gardeners' use..... Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

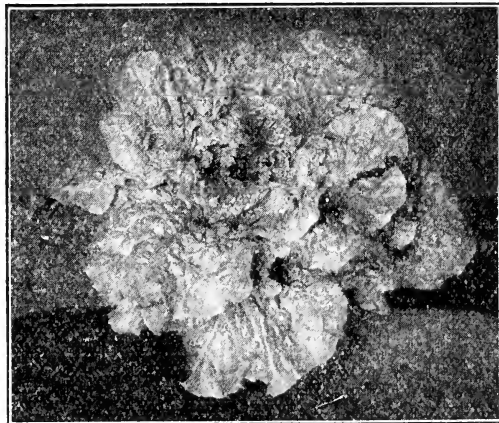
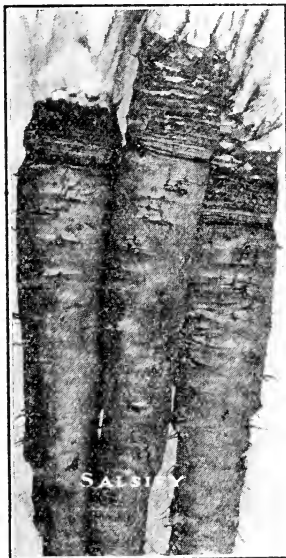
S P I N A C H

One ounce for 100 feet of drill—10 to 12 pounds for an acre.

FOR spring and summer use, sow either broadcast or in drills as early as the ground

can be worked. The fall sowing is the main one with our market gardeners, which is done from August to October, and by careful attention they have it in marketable condition throughout the entire winter and spring.

If the land is dry the seed should always be rolled or trampled in, for if the soil is loose the hot air shrivels the seed, so that it will not germinate.



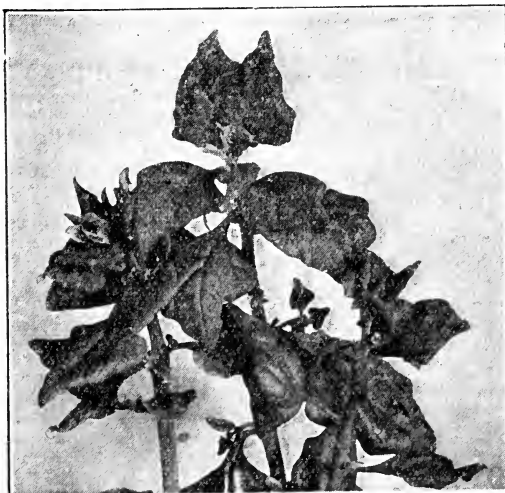
McCullough's Norwood Savoy

McCullough's Norwood Savoy This variety is one of the most important for market gardeners, also one of the best for the kitchen garden. A quick-growing, round-seeded variety, producing in abundance, thick, dark green, slightly crumpled leaves; in large demand for either spring or fall sowing... Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 45c.

Bloodsdales Savoy. The hardiest large Savoy leaved, curled and crimped, with thick, fleshy leaves; good for family and market purposes. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 40c.

Juliana. A new spinach of the Long Season type, but leaves are more crumpled, of a darker green color. Good size, thick and of good quality. Will remain fit for use after other varieties have bolted to seed except King of Denmark. Ready to cut in about 45 days. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 45c.

King of Denmark. This variety is superior to all others for spring planting, as it continues to grow and hold its fine quality for weeks after the other sorts have gone to seed. Makes a quick and low growth, producing an abundance of dark green leaves of large size and very much crumpled. It is ready for use as soon as other varieties and the leaves hold up remarkably well after being cut. The quality is excellent both for growing in the home garden and for market. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 45c.



New Zealand Spinach

New Zealand. Yields an abundance of the tenderest Spinach during the hottest months of the year, or in dry arid localities where the ordinary Spinach runs to seed. The seed is sown where the plants are to stand, in May, or earlier in a hotbed and transplanted, and the plants will continue to yield a supply of good leaves of excellent quality during the entire summer, requiring scarcely any attention... Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; 1 lb., 50c.

SQUASH

One ounce of the Bush Varieties for 40 Hills, or of the Large-Seeded Kinds, 15 Hills. Two to Three Pounds of the Bush, and 3 to 4 Pounds of the Large-Seeded for an Acre.

IT IS useless to sow until the weather has become settled and warm. Light soils are best suited for its growth. Prepare hills for the seeds by incorporating 2 or 3 shovelfuls of well-rotted manure with the soil for each hill. Plant the bush varieties from 3 to 4 feet each way, and the running sorts from 6 to 8 feet. Eight or ten seeds should be sown in each hill, thinning out after they have attained their rough leaves, leaving 3 or 4 of the strongest plants, after which cultivate same as Cucumbers.

To repel the Squash vine borer put a handful of tobacco dust close around the plants.

For Yellow-striped beetle and blight, spray early and often with Bordeaux Lead Mixture or Sulfoicide. Also dust with Bug Death or Slug Shot.

Summer Varieties

Mammoth White Bush. The best early variety for market or shipping. It grows to a large size; scalloped like a patty-pan.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Early Yellow Bush. An early, flat, scallop-shaped variety; color yellow; flesh pale yellow and well flavored.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Summer Crook-Neck. Covered with warty excrescences; color bright yellow; shell very hard when ripe.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Vegetable Marrow. Skin a greenish-yellow, flesh white, grows 9 to 18 inches long.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.



Fall and Winter Varieties

Hubbard. Standard Winter Squash; grown more extensively than any other late variety; color dark green, shell extremely hard; flesh dry, fine grained and sweet; excellent keeper.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Warted Hubbard. This strain, without doubt, grows the finest Hubbard in existence. The wartiness indicates a very hard shell, which is one of the features in a long-keeping Squash; it also denotes extra choice quality—the harder and more warty the shell of a Hubbard Squash is, the more delicate and sweet the flesh will be found to be.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Golden Hubbard. Fruit is of the same shape as Green Hubbard, and warted, but average one-half to one-third smaller in size. They are earlier in season, but keep in fine condition through the winter. The skin is deep golden-yellow and very attractive. Flesh is deep golden-yellow, fine grained and delicious.

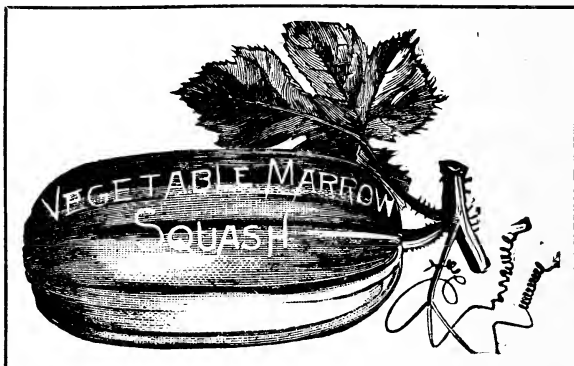
Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; per lb., \$1.25.

Mammoth Chili. Rich orange-yellow; flesh thick and of good quality for making pies; grows to an enormous size; a valuable sort for feeding stock.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; per lb., \$1.50.

Boston Marrow. A popular winter variety; quality unexcelled.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 30c; per lb., \$1.00.

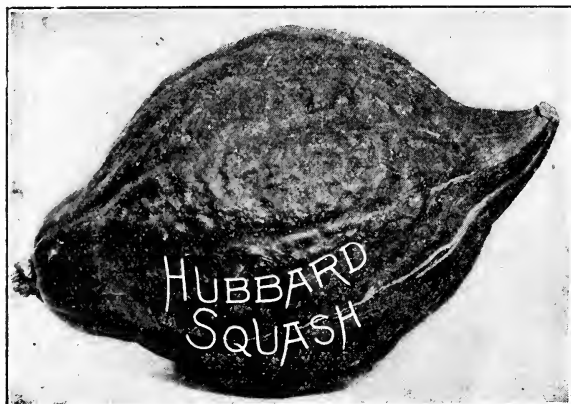


Delicious. Resembles the old Hubbard, having a dark olive-green hard shell, weight from 5 to 10 lbs. For table use, it cannot be excelled, the flesh being remarkably thick, fine-grained, sweet and of rich flavor.

Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; per lb., \$2.00.

Fordhook. A winter Squash of great merit. Of handsome bright yellow color outside and straw-yellow within. The flesh is dry and sweet.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c; per lb., \$1.50.



TOBACCO

THE seed should be sown as early as possible after danger of frost is over. A good plan is to burn a quantity of brush and rubbish in the spring on the ground intended for the seed-bed, then dig and thoroughly pulverize the earth and mix the ashes, after which the seed may be sown and covered very lightly.

White Burley. Extra stock, grown largely for the manufacture of fine-cut.... Pkt., 10c; oz., 50c.

Stand-Up Burley. The leaves instead of drooping have a more erect position on the plant, turning upward rather than down—hence the name "Stand-Up." It is fast becoming the most popular type of Burley and largely grown by planters in all Burley sections.

Pkt., 10c; oz., 50c.

TOMATO

One Ounce of Seed Will Produce About 3,000 Plants

SOW in a hotbed, green-house or window in a sitting room, where night temperature is not less than sixty degrees, about the first week in March, in drills five inches apart and half an inch deep. When the plants are about two inches high they should be set out in boxes three inches deep, four or five inches apart, in same temperature, or removed into small pots, allowing a single plant to a pot.

They are sometimes transplanted a second time into larger pots, by which process the plants are rendered more sturdy and branching. About the middle of May, the plants may be set in the open ground. They are planted for early crops on light, sandy soil, at a distance of three feet apart, in hills in which a good shovelful of rotted manure has been mixed. On heavy soils, which are not suited for an early crop, they should be planted four feet apart. Water freely at the time of transplanting and shelter from the sun a few days until the plants are established. For late use, sow in a sheltered border in May, and set out the plants in July; the green fruit can be picked off before frost and ripened under glass. By training the tomato vines on trellises or tying to stakes, they will increase in productiveness, the fruit will ripen better, and be of finer quality. To control blight, spray with Bordeaux, and to control fungi, spray with Sulfocide.

McCullough's Radio. A cross between Truckers' Favorite and Bonnie Best. Introduced by us as a medium early variety, it fully met all our expectations as it is ready for market immediately following the extra early varieties, coming on the market when demand and prices are at their best for second early sorts. Its large and uniform size, splendid purple color, firmness and flavor commend it. A heavy yielder of uniform-sized fruit and continues in bearing until frost.

Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

McCullough's Norwood. The plants are strong and vigorous, bearing an abundance of large, smooth fruit of a beautiful purplish crimson color, which is produced in clusters of four to six; is large, of perfect shape, and retains its size until late in the season. The flesh is remarkably thick, firm and solid and of the finest quality, with few seeds.

Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Beauty. Rich, glossy crimson, with a slight purple tinge. The fruit grows in clusters of four to five, is of large size, very smooth, and retains its character until late in the season. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Bonney Best. Fruit of good size, bright red color, smooth, solid and uniform. A second early and very productive.

Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Buckeye State. The large tomatoes are borne in immense clusters of four to eight. Color rich, glossy crimson, with a slight purple tinge.

Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.30.

Cincinnati Purple. A valuable variety, especially adapted for canning and shipping. It is very large, color a dark purplish red. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Crimson Cushion or Beefsteak. Is very large, round and regular; bright scarlet skin, solid flesh of best quality, seed cells small. Plants are very prolific and of fine appearance. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

Detroit. A second early purple tomato; bears uniformly large, handsome, smooth, globe-shaped fruit of excellent quality; is also a desirable variety for shipping.

Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Dwarf Champion. Of dwarf, stiff, distinct, upright growth, scarcely needing support; early and prolific; smooth, medium-sized fruit of pinkish purple color.

Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

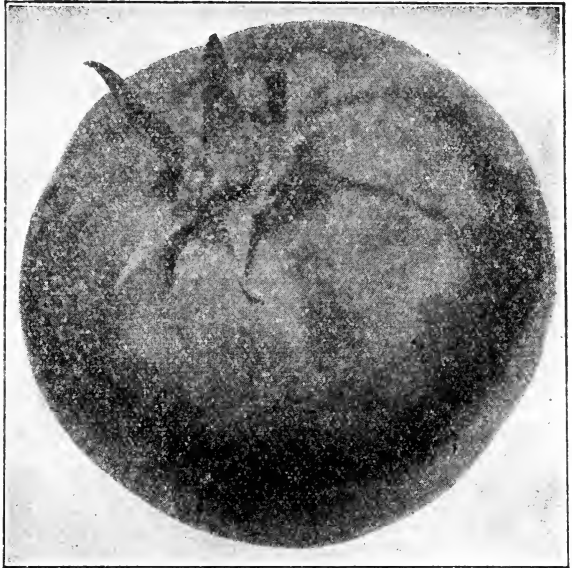
Earliana. The earliest tomato, of good size and flavor; fruit is deep scarlet, of medium size, averaging $2\frac{1}{2}$ inches in diameter; with solid center and slightly acid flavor. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Early Jewel. This early variety is one of the best; fruit medium size, solid, bright scarlet in color, with very few seed. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Golden Queen. Large, smooth fruit, of a beautiful golden color; quality excellent; attractive for slicing, and mixing with sliced red sorts. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

John Baer. An early tomato; produces large, bright red, solid tomatoes and has a mild and deliciously sweet flavor. Fruit is solid and makes a good shipping tomato.

Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.



McCullough's Radio

June Pink. Resembles the Earliana in habit of growth and shape of fruit, but the color is pink. The fruit begins to mature very early; measures 3 inches in diameter and is of excellent quality.

Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Matchless. A standard main crop, bright red variety, producing enormous crops of finest scarlet fruit.

Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Oxheart. The attractively different shape, large size and excellent table qualities, it has quickly come into general favor. While the Oxheart is not a heavy yielder, the grower for market is going to find the Oxheart an attractive sort, will sell on sight. The skin is pink. It is almost seedless. Flesh frequently shows two inches thick without a seed cavity. The flavor has that delicious Tomato quality that every lover of this fruit knows so well. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

Ponderosa. One of the largest fruited tomatoes. The fruit is of a purplish pink color, very solid and ripens early; nearly seedless, with firm, meaty, rich red flesh; unequaled and delicious either sliced, cooked or canned; a healthy, luxuriant grower and continuous yielder from early in the season until frost.

Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

Stone. Fruit very large and deep; bright scarlet; smooth; ripening evenly to the stem without a crack; exceedingly solid and firm-fleshed; of finest quality.

Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Trucker's Favorite. One of the finest large-fruited purple sorts. The plants are of strong growth and productive. Fruit is large size, deep through, very smooth and regular, free from cracks, solid, meaty, with small seed cells and fine flavor. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

Small-Fruited Tomatoes

THE following small-fruited varieties are used for making preserves, and are also quite ornamental while growing in the garden.

Pear-Shaped, Red. A small preserving tomato, of pear shape and bright red color. Pkt., 10c; oz., 40c.

Pear-Shaped, Yellow. Similar to the above in shape, but of bright yellow color. Pkt., 10c; oz., 40c.

Red Cherry. Small, round fruit, resembling cherries; used for preserves. Pkt., 10c; oz., 40c.

Yellow Plum. Bright lemon-colored; oval; small sized; used for preserves. Pkt., 10c; oz., 40c.

Strawberry, Winter Cherry or Husk. Low, spreading plants, bearing yellow fruit $\frac{1}{2}$ -inch in diameter, surrounded by a husk; for preserving. Pkt., 10c; oz., 40c.

Wilt Resistant Tomatoes

THE loss caused by tomato wilt is increasing each year. Wilt is a fungus that lives in the soil and invades the plant through its roots. When diseased tomato vines are plowed under they only serve to increase the infection. In the early stages of the disease the leaves curl; later they turn yellow, beginning at the bottom of the plant which slowly dies, usually about the time the fruits are half grown. No amount of spraying will do any good, the only means of controlling wilt is to grow wilt resistant varieties.

Marglobe. Wilt Resistant. Very productive second-early variety. Fruits large, smooth, meaty, red, globular. It will stand up longer after it becomes flushed than any other variety of tomato. Highly resistant to wilt and somewhat resistant to blights.

Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

TOMATO PLANTS are a specialty of ours. See Vegetable Plants.

Marvana. Wilt Resistant. This variety is commanding attention on account of its remarkable wilt-resisting qualities. A first-early red-fruited variety resembling Earliana in earliness, size, shape of fruits and in type of foliage but its fruits are usually smoother, more crimson and slightly less acid. A heavy yielder of excellent quality....Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Marvelosa. Wilt Resistant. Very productive second-early variety. Fruits medium-large, smooth, pink, globular. The foliage is of a dark green color and very uniform. Highly resistant to wilt and somewhat resistant to blights.....Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Norton. Wilt Resistant. Norton was developed from the Stone, ripens at the same season, and can be classed as a wilt resistant Stone, but a more abundant bearer and the fruits are more solid. It yields a heavy crop of large smooth solid red fruits that ripen slowly, therefore, is a good keeper and a good shipper; it is also remarkably drought resistant. An excellent tomato for home garden, for canning and for the late market.

Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00.

T U R N I P

One ounce will sow 150 feet of drill: 1 pound to the acre.

THE soil for Turnips should be rich and mellow. For an early crop, sow early in the spring, in drills about a foot apart and thin out. For a general crop, sow from the first of July to the last of August, in drills 18 to 20 inches apart, and thin out the plants to 8 to 10 inches. When sown broadcast, Turnip Seed should be mixed with fine soil, sand or ashes, so as to have the seed more evenly distributed. To destroy the fly, which is very destructive to the Turnip crop, use "Hammond's Slug Shot." Should the crop be destroyed, harrow the ground immediately and sow again.

Extra Early Purple Top Milan.

This variety is at least two weeks earlier than any other. It is of a handsome appearance, somewhat flattened, white with purple top; flesh snow-white, fine grained and delicate flavor.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; per lb., \$1.00.

Purple Top, Strap-Leaf. This

is the most popular variety grown for table purposes; an early, flat, white Turnip, with purple top, of excellent quality. The best variety for general use.....Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Purple-Top Globe. A variety of decided merit. Of globular shape, very handsome and of superior quality, either for the table or stock. It is a heavy producer, early, of rapid growth and an excellent keeper.

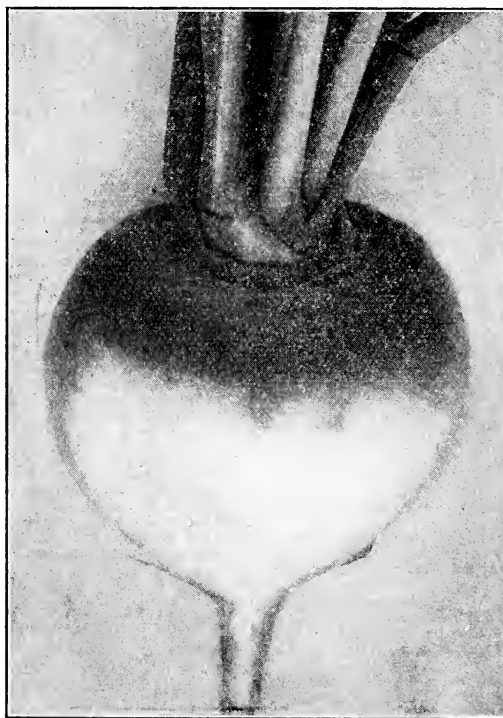
Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

White Flat Dutch. An early white-fleshed variety, of quick growth, mild flavor and excellent quality.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Snowball. Extra early. A variety of sterling merit, perfectly round, early, pure white, very solid, sweet; short top.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.



Purple Top White Globe

Large White Globe. Flesh white, firm and crisp; a very desirable early variety.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Golden Ball, or Orange Jelly.

A rapid grower, of excellent flavor, globe-shaped, bright yellow color, good keeper; a superior table or stock variety.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

White Egg.

An egg-shaped variety for spring or fall sowing; flesh white, firm, fine grained, mild and sweet.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Long White, or Cow Horn.

Grows quickly, partly above ground; very productive; flesh white, fine grained, sweet; excellent quality for family and market gardeners' use.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Seven Top.

Cultivated extensively in the South for the tops, which are used for greens. It is very hardy and will grow all winter. Does not produce a good root.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Swede or Rutabaga Turnip

FOR Rutabagas, sow seed in seed-bed in spring and transplant to good, warm soil, in rows at least 2 feet apart and 8 to 10 inches apart in the rows, or sow in open ground during June and early July. Take up the roots just before winter, top and store in cool cellar or pit outdoors.

American Purple Top. Very hardy and productive; flesh yellow, solid, sweet; good for stock or table use.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

Long Island Improved. A uniform large rooted, quick growing, yellow fleshed sort.

Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 25c; per lb., 75c.

VEGETABLE PLANTS AND ROOTS

Our Vegetable Plants are all grown from reliable seed and true to name. We have them to offer during the season, coming in fresh daily. Special prices given on large quantities.

ASPARAGUS ROOTS

(Ready April 1st.)

DO not fail to get Asparagus Roots planted early.

Deep, warm, rich, loamy soil, deeply and thoroughly stirred, is required for permanent bed. Use manure and fertilizers freely. Make furrows 2 or 4 feet apart and 8 to 10 inches deep. Set the two-year-old roots 18 to 24 inches apart in the bottom of furrows and cover lightly at first. Gradually fill in with soil and old compost. In early spring, fork or plow the bed shallow and carefully, or pulverize the surface by harrowing. Give clean cultivation until fall; then cover with manure or compost. Second season after planting, hill up the rows, especially for blanched "grass," and cut sparingly for use. After that the bed will give full crops. In the fall, as soon as the tops are ripe and yellow, they should be cut and burned.

2 Year Old Roots

Martha Washington. 40c per dozen; \$2.00 per 100.

Mary Washington. Pedigreed.

We are now prepared to offer one, two and three year old roots of this rust-resistant variety. In the course of the next few years ninety percent of Asparagus planted will be Washington.

We quote as follows for March or April delivery and unsold:

One year old roots, 35c per doz.; \$1.75 per 100; \$16.00 per 1000.

Two year old roots, 50c per doz.; \$2.50 per 100; \$20.00 per 1000.

Three year old roots, 65c per doz.; \$3.50 per 100; \$30.00 per 1000.

Pedigreed seed of Mary Washington, Pkt., 10c; oz., 30c; ¼ lb., \$1.00, postpaid.

We cut last spring from a bed of two year old roots of the Mary Washington set out the spring before.

Giant Argenteuil. A French variety of large size; green in color.....Per dozen, 25c; per 100, \$1.50.

Palmetto. A large, dark green variety with pointed tips. Per dozen, 25c; per 100, \$1.50.

If wanted by mail, add 5c per dozen, 15c per 100 for postage.

CELERY PLANTS

(Ready June and July.)

McCullough's Paris Golden Yellow, Golden Self-Blanching, Golden-Hearted Dwarf, Giant Pascal. All the above, per 100, 75c.

CABBAGE PLANTS

(Ready about April 1st.)

Early Jersey Wakefield......Per doz., 15c; per 100, 60c.

Louisville Drumhead......Per doz., 15c; per 100, 60c.

Premium Late Flat Dutch.....Per doz., 15c; per 100, 60c.

CAULIFLOWER PLANTS

(Ready April 1st.)

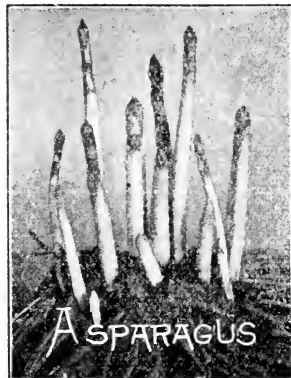
Earliest Dwarf Erfurt......Per doz., 30c; per 100, \$2.00.

Early Snowball......Per doz., 30c; per 100, \$2.00.

CHIVES

(Ready April 1st.)

Good Clumps......10c each; per doz., \$1.00.



EGG PLANT

(Ready about May 15th.)

Black Beauty. Per doz., 50c.

HORSERADISH SETS

(Ready April 1st.)

Per doz., 25c; per 100, \$1.50. (By mail—per doz., 30c; per 100, \$1.75—postpaid.)

BERMUDA ONION PLANTS

Grown from Imported Seed produce the genuine yellow Bermuda Onion. Thin skin, white meat. Sweet and Tender. It is hardy, easy to grow, easy to harvest, produces a better crop, keeps better, and makes larger onions than any other variety

of Bermuda Onion. It will produce perfectly in any state. Makes early green onions, grows fast and matures quickly when the market is at its best. They are excellent for cooking Salads or Slicing. These Plants are large size, strong and sturdy. Frost or light freeze will not injure them. They will keep in a dry place for two or three weeks after being pulled. 1000 plants will produce from 7 to 10 bushels of onions. Our Plants are full count, 100 to the bunch, 60 bunches or 6000 plants to the crate.

Per 100, 25c; per 1000, \$2.00.

PEPPER PLANTS

(Ready about May 15th.)

Large Bell, or Bull Nose......Per doz., 40c.

Ruby King......Per doz., 40c.

Long Red Cayenne......Per doz., 40c

SWEET POTATO PLANTS

(Ready about June 1st.)

Nancy Hall and Jersey Yellow.

Per 100, 50c; per 1000, \$4.00.

TOMATO PLANTS

(Ready about May 1st.)

Transplanted plants offer many advantages over seedlings; they produce fruit much earlier and are more easily shipped.

TRANSPLANTED TOMATO PLANTS

Earliana, June Pink, Detroit, Beauty, McCullough's Radio, McCullough's Norwood, Trucker's Favorite, The Stone, Ponderosa, Cincinnati Purple, Dwarf Champion.

All the above—Per doz., 25c; per 100, \$1.75.

WILT RESISTANT TOMATO PLANTS

Marvana, Marvelosa, Marglobe, Norton. 35c per dozen; \$2.00 per 100.

RHUBARB ROOTS. (Ready April 1st.)

Linnaeus. The best Pie-Plant.

Victoria. Good for canning or cooking. Small Roots of either variety.....Each, 10c; per doz., \$1.00.

Large Roots or Clumps, Each, 25c; per doz., \$2.50.

If wanted by parcel post, add 5c each or 30c per dozen for postage.

SEED SWEET POTATOES.

Nancy Hall and Jersey Yellow. Write for prices. Ready for shipment about April 1st. For plants, see above.

ROSES

PLANTING AND PRUNING INSTRUCTIONS

The best soil for Rose beds is a medium, heavy clay for Hybrid Perpetuals, and a somewhat lighter soil for Hybrid Teas, both soils requiring a good drainage.

The beds should be dug about eighteen to twenty-four inches deep, and a well mixed compost mixed with the sub-soil, also incorporate bone meal or Vigoro thoroughly.

Set the rose in the hole, spreading out the roots carefully, filling in good soil and firming it around roots with the hands. When hole is filled, tamp firmly with the feet or spade. This is important as roses will not do well in loose soil.

Garden Roses require pruning and this is one point in rose planting that we cannot stress too strongly. They should be cut back severely when planted out. Another essential thing is to prune all broken roots.

One very satisfactory way of planting roses is pulling the soil up around the rose to a height of five to six inches then prune off all branches to about one or two inches above the soil, leaving in this state for about ten days or two weeks or until buds show signs of growth, then the soil can be removed. If not planted in this way we would suggest a pruning of about two-thirds of the plant. A severe pruning will better the individual blooms. Roses planted this way prove very satisfactory, but the point that we wish to encourage is to prune your roses and prune severely to insure good roses and to avoid the disappointment of having them die.

HYBRID-TEA ROSES

We offer the following list of dormant Roses, all field grown stock, 2 year old, ready for delivery about March 10th.

Price, 65c each; \$6.00 for 10.

Betty. Coppery rose overspread with yellow.
Columbia. Glowing pink.
Double White Killarney. Waxy white.
Duchess of Wellington. Intense saffron-yellow, stained rich crimson.
Gruss An-Teplitz. Scarlet; constantly in bloom.
Jonkheer J. L. Mock. Outside of petals deep pink, inside silvery rose.
K. A. Victoria. White; fine form.
Killarney. Pink Favorite bedding rose.
La France. Rose-pink. One of the best bedding roses.
Los Angeles. Flame-pink, toned coral, shaded gold at base.
Mme. Butterfly. Bright pink, apricot and gold.
Mrs. Aaron Ward. Yellow, sometimes shaded salmon and rose
Ophelia. Salmon-flesh, shaded rose.
Padre. Copper-scarlet, yellow at base of petals; semi-double.
Radiance. Carmine-pink, yellow at base of petals.
Red Radiance. Dazzling crimson-scarlet.
Rose Marie. Clear rose-pink.
Souv. De Claudius Pernet. Sunflower-yellow.
Sunburst. Rich yellow, shaded coppery orange.



SELECT HYBRID-TEA ROSES

We offer, this season, the finest and choicest collection of Hybrid-Tea Roses that we ever offered at one time. All our stock is selected grade, 2 year old, No. 1, each plant labeled and roots wrapped in packing and burlap.

Betty Uprichard. One of the finest new Roses, with brilliant copper-red buds and semi-double, salmon-pink flowers stained with copper-pink on the outside. Profuse bloomer.....75c each; \$7.00 for 10.

Briarcliff. The most recent and the best sport of Columbia. Fine, handsome flowers of the even shade of silvery rose-pink.....75c each; \$7.00 for 10.

Cuba. Tall plants with excellent foliage, producing enormous, semi-double blooms of blazing red-orange.
 75c each; \$7.00 for 10.

Dame Edith Helen. One of the largest and most perfectly shaped pink Roses known. Blooms abundantly, with long, strong stems, and the flowers resemble a perfectly shaped, bright pink Francis Scott Key. It has attracted abundant praise and unstinted admiration everywhere. The most perfumed of all pink Roses.
 \$1.00 each; \$9.00 for 10.

Dorothy Page Roberts. Large, copper-pink buds and flowers suffused with apricot-yellow.
 75c each; \$7.00 for 10.

Eldorado. Splendid, vigorous plants with large, solid, golden yellow buds, opening to very double, handsome, bright yellow blooms. One of our finest yellow Roses and becoming increasingly popular as its merits are known. The most perfumed of yellow Roses.
 75c each; \$7.00 for 10.

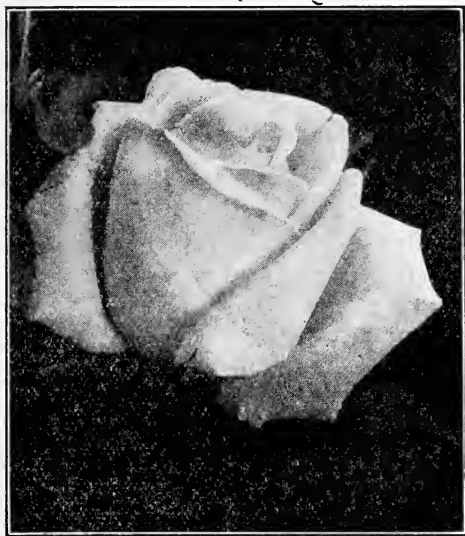
Etoile De Feu. The handsomest bright orange-pink of its type. Much better than Louise Catherine Breslau. Gorgeous, and Arthur R. Goodwin. The plants are very vigorous, low and branching, with healthy foliage, and steadily produce large, blazing blooms of amazing intensity of color.....\$1.00 each; \$9.00 for 10.

John Russell. A vigorous grower of almost Hybrid Perpetual habit, with large flowers borne singly on the top of strong stems. It is rich crimson-scarlet, shaded with black, and at all stages of the bloom is one of the most perfectly formed flowers we have ever seen. It blooms with us continuously from June until frost.
 \$1.25 each; \$12.00 for 10.

Lady Alice Stanley. Sturdy, active bushes with distinctive, healthy foliage and large, erect, very double flowers of light silvery pink, darker on the outside of the petals. One of the best Roses in the list, popular since the day of its introduction. Its unusual hardiness recommends it for cold climates.....75c each; \$7.00 for 10.

Lady Hillingdon. The always-popular, beautiful apricot-yellow Tea Rose with lovely buds and exquisitely formed open blooms produced continuously. Probably the hardest of all Tea Roses and undoubtedly the best yellow bedding Rose.....75c each; \$7.00 for 10.

ROSES, HYBRID-TEAS—Continued



Lady Margaret Stewart. Stout, erect plants with immense, copper-orange buds, opening to bright golden yellow flowers of wonderful shape and luscious color. It is a severe rival of Rev. F. Page-Roberts and it would not surprise us to see it become even more popular.
\$1.25 each; \$12.00 per 10.

Margaret McGredy. The first time in three generations of the house of McGredy that a Rose was thought good enough to be named for a member of that Rose aristocratic family. Much was expected of Margaret, but she won everywhere with flying colors. Brilliant red petals on hinges of deep gold. Buds upright. Seldom out of bloom.
\$1.00 each; \$9.00 for 10.

Mme. Jules Bouche. Bushy, erect plants with medium-sized, well-shaped, white flowers, lightly tinted with pink at the center, produced abundantly throughout the season. This is the most dependable white Rose for bedding purposes.
\$1.00 each; \$9.00 for 10.

Mme. Leon Pain. Stocky, spreading plants with beautiful foliage and large, ruffled, light pink flowers of beautiful form and fragrance. A fine thing for bedding and has been popular for many years. Almost immune from black-spot.
75c each; \$7.00 for 10.

Mrs. A. R. Barraclough. A new variety of giant growth with long, tapering buds and high-pointed blooms of light, glowing pink, tinted with salmon. Although very new, it has made a name for itself, and we think it will be very popular.
\$1.00 each; \$9.00 for 10.

Mrs. Erskine Pembroke Thom. Generally conceded to be immensely superior for garden planting to Souv. de Claudius Pernet and others of that type. The fine long buds open into perfectly shaped, open flowers of rich lemon-yellow. Very vigorous and continuously in bloom.
\$1.00 each; \$9.00 for 10.

Mrs. Henry Morse. The flowers are bright pink with silvery shadings and are incessantly produced by low, branching bushes. It has a larger and more artistic bud than Radiance, on which it is an improvement, and the plant has equal blooming qualities, vigor and health. This is a modern Rose, much superior to the old-time pinks, and is rapidly becoming very popular.
\$1.00 each; \$9.00 for 10.

Rev. F. Page-Roberts. Marvelously colored flowers of golden yellow stained with copper, and reddish buff on the outside. One of the most popular in the world and planted in great quantities every year.
\$1.50 each; \$12.50 for 10.

Roselandia. A dark saffron-yellow bloom of the Ophelia type, generally considered an improved Golden Ophelia.
75c each; \$7.00 for 10.

Souv. de H. A. Verschuren. Light yellow flowers of the Frank Reader and Golden Ophelia type.
75c each; \$7.00 for 10.

Templar. Very full, fragrant, crimson flowers.
75c each; \$7.00 for 10.

Wilhelm Kordes. Strong, branching growth with large, very double, star-shaped flowers of vivid salmon-pink shaded with orange and yellow. One of the most striking modern Roses and steadily increasing in popularity.
\$1.25 each; \$10.00 for 10.

Willowmere. This is the Rose to plant where Los Angeles does not succeed. It has wonderful long-pointed buds and magnificent brilliant pink flowers suffused with a golden light. The plants are erect, very vigorous and constantly throw up splendid sprays of bloom.
75c each; \$7.00 for 10.

HYBRID PERPETUAL ROSES

AMONG all the hardy plants few are so commonly well liked or more valuable than the roses, particularly the "June Roses," as the Hybrid Perpetuals are called. They are strong growers, bearing large globular flowers and are so hardy that they succeed in any locality.

American Beauty. A very popular purplish crimson variety.

Boule de Neige. (Ball of Snow.) Pure white, showing light flesh upon opening; elegantly formed, very full and double.

Frau Karl Druschki. Long buds and magnificent snow-white blooms with large saucer-shaped petals.

General Jacqueminot. Shapely buds and handsome blooms of bright, shining crimson, rich, brilliant, velvety and fragrant.

Marshall P. Wilder. Deep, rich, glowing red; extra large, semi-globular and full; a very strong grower.

Mistress John Laing. Clear, bright, shining pink; immense, full blooms on long, stiff stems.

Paul Neyron. Bright, shining pink, clear and beautiful; very double and full; finely scented.

Any of the above varieties.....75c each; \$6.50 for 10.

DWARF, POLYANTHA or BABY RAMBLER ROSES

White Baby Rambler. **Red Baby Rambler.**

Pink Baby Rambler. **Crimson Baby Rambler.**

Yellow Baby Rambler.

Any of the above varieties.....75c each; \$6.50 for 10.

HARDY CLIMBING ROSES

Climbing American Beauty. Extremely beautiful large buds and flowers of bright purplish crimson.

Climbing Lady Ashtown. A splendid, hardy, climbing Hybrid Tea Rose with exquisite, pointed blooms of vivid pink.

Climbing Los Angeles. The same beautiful salmon and gold flowers as the dwarf, but of strong, healthy growth.

Climbing Mme. Caroline Testout. Climbing form of the well-known Hybrid Tea.

Doctor W. Van Fleet. A delicate shade of flesh-pink deepening to rosy-flesh in the center; buds pointed, flowers full and double.

Mary Wallace. Bright, clear rose-pink with salmon base to the petals; very large, shapely, free blooming. Pillar rose type with glossy, disease resistant foliage.

Paul's Scarlet Climber. Vivid scarlet, shaded crimson, non-fading; semi-double flowers of medium size in large trusses produced in great profusion during an exceptionally long blooming period.

Silver Moon. Clear silvery-white with a mass of bright yellow stamens; petals of splendid substance and beautifully cupped.

Any of the above varieties.....75c each; \$7.00 for 10.

ROSES—Continued

POT GROWN ROSES

We offer for May delivery a very fine selection of Pot Grown Roses, all 6 inch pot plants in full foliage. Our list contains all the fine garden varieties. If you are looking for Roses in foliage and ready to bloom these are just the right plants.

Betty Uprichard.	Briarcliff.
Duchess of Wellington.	Margaret McGredy.
Mme. Jules Bouche.	Mrs. E. P. Thom.
Mrs. Henry Morse.	Miss Rowena Thom.
Ville de Paris.	Etoile de Feu.
Wilhelm Kordes.	Etoile de Hollande.
Souv. de H. A. Verschuren.	Roselandia.
Chas. Kelham.	Mrs. A. R. Barraclough.
Dame Edith Helen.	Elsie Beckwith.
E. G. Hill.	Emily Charles.
Angele Pernet.	Willowmere.

All the above varieties at . . . \$1.50 each; \$12.50 for 10.

STANDARD OR TREE ROSES

Budded on Strong Rugosa Stems.

We offer the following assortment of select plants on 36-inch stems:

HYBRID TEAS

Betty. Coppery rose, overspread yellow.
Betty Uprichard. Coppery red buds; salmon-pink flowers.
Double White Killarney. White.
Hadley. Velvety crimson.
J. Otto Thilow. Dark pink, shaded with gold and amber like La France.
Julien Potin. Rich yellow.
Kaiserin Auguste Viktoria. White; fine form.
Killarney Queen. Cerise-pink; vigorous grower.
Lady Ashtown. Shining pink, shaded to yellow.
Lady Hillingdon. Deep apricot-yellow.
Mme. Butterfly. Bright pink, apricot and gold.
Mme. Caroline Testout. Rich pink.
Mrs. Aaron Ward. Yellow, sometimes shaded salmon and rose.
Mrs. A. R. Waddell. Scarlet buds, opening to deep reddish saffron.
Mrs. W. C. Egan. Light pearl-pink star-shaped flowers with golden yellow at base of petals.
Radiance. Carmine-pink, yellow at base of petals.
Red Radiance. Dazzling crimson.
Souv. de Claudius Pernet. Sunflower-yellow.

All the above at . . . \$3.50 each; \$32.50 per dozen.

Sunshine, air, and water cannot grow plants without food. Supply the necessary nourishment by using Vigoro, the specially prepared plant food.

HEDGE PLANTS

CALIFORNIA PRIVET. (*Ligustrum Ovalifolium*.) The most advantageous manner of planting is in double rows, the two rows being about 8 inches apart. The plants should be set 12 inches apart in the row, alternating the plants. In order to secure a dense hedge from the base up, the plants should be severely pruned the first two seasons.
18 to 24 inches. \$1.00 for 10; \$4.50 per 100.
24 to 30 inches. \$1.20 for 10; \$6.50 per 100.

ALTHEA. (Rose of Sharon.) Few are aware of the strikingly attractive characteristics of this perfectly hardy and profuse flowering shrub, when used as a hedge plant or as a screen. Plant 15 to 18 inches apart. 30c each; \$2.50 for 10; \$18.00 per 100.

BERBERIS THUNBERGII. (Japan Barberry.) Where a low, dwarf deciduous hedge is wanted, nothing equals this beautiful Barberry. Requires but little pruning to keep it in shape. Plant 12 to 15 inches apart. 12 to 18 inches. \$2.50 for 10; \$20.00 per 100.

SPIREA VAN HOUTTEI. An ideal flowering shrub to use as a dividing line between properties. Plant 18 to 24 inches apart. 25c each; \$2.00 for 10.

WEeping TREES

BIRCH. (Cut-leaf Weeping.) A tree of wonderful grace and beauty. Tall, slender, drooping branches and delicately cut leaves. It colors brilliantly in the fall. Its bare white trunk and branches make a beautiful winter picture. 6 to 8 feet. \$5.00 each;

MAPLE. Weir's Cut-Leaf Weeping. This variety of the maple has very pendulous branches and the leaves are deeply cleft. A beautiful specimen tree, with a distinct half-drooping habit. Admirably adapted for lawns. 6 to 8 feet. \$2.25 each.

MULBERRY, TEAS' WEEPING. The most graceful hardy weeping tree in existence. Forms a perfect-shaped head and the slender branches grow downward parallel with the stem, forming an umbrella-like shape. It takes the foremost place among weeping trees; has beautiful foliage and luscious fruit, is hardy, enduring the cold of the North and the heat of the South, safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting. 1 year head, \$2.75 each; 2 year head, \$4.00 each.

WILLOW. Wisconsin. A large tree with drooping branches. Leaves are bright green. Excellent for wet locations, but a credit to any lawn. 6 to 8 feet. \$1.75 each.

AZALEA

A very popular and beautiful shrub. Azalea are best grown in a mixture of leaf mould, sand and loam, but will also grow satisfactorily in a good garden soil.

We can furnish good select stock, all shipped balled and burlapped.

Azalea, Amoena. Double purplish-red. 10 to 12 inches, \$2.50 each; 12 to 15 inches, \$3.00 each.

Azalea, Hinamoya. The best Pink. 10 to 12 inches, \$3.00 each.

Azalea, Hinodegiri. Bright red. 10 to 12 inches, \$3.50 each; 12 to 15 inches, \$4.00 each.

Azalea, Mollis. Yellow and red. 12 to 15 inches, \$3.00 each; 15 to 18 inches, \$3.50 each.

TRAILING PLANTS

For Window Boxes, Hanging Baskets and Vases.
Ready for Delivery After May 10th.

Asparagus Plumosus Nanus. (*Asparagus Fern*.) This graceful climbing Asparagus has fine foliage, and will last for weeks after being cut. It is an excellent house plant. 25c each; \$2.00 for 10.

Asparagus Sprengeri. (Emerald Feather.) One of the best plants to grow in baskets, for greenhouse or for outdoors in the summer. The fronds frequently grow 4 feet long, and are now considered indispensable in all fine decorations. 25c each; \$2.00 for 10.

Ice Plant. This plant is largely used for hanging baskets, window boxes and vases. In addition to its trailing habit it produces pretty pink flowers and the plant is furnished with leaves of a fleshy texture. They should be largely used as they present a very striking appearance when in bloom. 35c each; \$2.50 for 10.

Thunbergia. (Black-Eyed Susan.) Beautiful rapid-growing climber, preferring a warm, sunny situation; used extensively in hanging baskets, vases, low fences, etc.; very pretty flowers in buff, white, orange, etc.; with dark eyes; mixed colors. 25c each; \$2.00 for 10.

Tradescantia. (Wandering Jew.) We have two varieties of this, *Vittata* and *Aquatica*. The *Vittata* is the white striped variety and the *Aquatica* has darker foliage. Both of these are largely used as house plants and require a very moist situation. 20c each; \$2.00 for 10.

Trailing Coleus. This is a very desirable plant and largely used in window boxes, hanging baskets and vases. In appearance it resembles the *Coleus* but has the trailing habit. 25c each; \$2.00 for 10.

Trailing Lobelia. (*Lobelia Erinus*.) This is a beautiful trailing plant with blue flowers. The foliage is a very dark green. It should be in all collections of trailing plants. 25c each; \$2.00 for 10.

Vinca Vines. (Trailing Vinca.) Largely used and is a well known vine for hanging baskets, window boxes and vases, with bright green foliage striped with white. 25c each; \$2.00 for 10.

Water Ivy. This is another trailing plant with bright attractive foliage, used in connection with the Trailing Vinca which makes a very effective display. 25c each; \$2.00 for 10.

POSTAGE:—Prices do not include prepayments by mail or express. If wanted by mail, add for postage within third zone—5c each, or 15c for 10.

Trailing Plants, when sent via Parcel Post, travel exclusively at buyer's risk.

BEDDING AND GARDEN PLANTS

Ready for delivery after May 10th.

THESE are all well grown plants. Grown in pots large enough to develop them properly. They will be forwarded in paper pots, so as to protect the roots. As a rule the plants will be in bloom or showing color.

We urge customers to have their plants forwarded via express.

We can send them via parcel post, providing sufficient postage is sent with order, but can assume no responsibility whatever for damage in transit when sent this way.

We make no charge for packing.

AGERATUM (Floss Flower)

One of the very best bedding plants, with bright blue flowers; compact growth; fine bedder.

25c each; \$2.00 for 10.

ALTERNANTHERA

Used principally for carpet bedding effects and edgings; fine for working out designs; of very dwarf growth, 4 inches high.

Aurea Nana. Green and yellow, mottled foliage.

Brilliantissima. Red, with a slight trace of green.

20c each; \$1.50 for 10.

ASTERS

They should have an open, sunny position, and prefer a good, heavy loamy soil, enriched with a liberal quantity of thoroughly rotted manure.

10c each; 90c for 10.

BEGONIA VERNON

Deep red flowers and bronzy-red foliage. 25c each; \$2.00 for 10.

CALENDULA (Pot Marigold)

Showy free-flowering hardy annuals, growing in any good garden soil, producing a fine effect in beds or mixed borders, continuing in bloom from early summer until killed by frost; valuable also for pot culture. 25c each; \$2.00 for 10.

CANNA PLANTS

The Canna Plants we offer are grown by our specialist and are widely and favorably known. Strong, healthy plants from 4 inch pots.

David Harum. Brilliant scarlet flowers; dark foliage. 3 feet.

Gladiator. Deep yellow flowers, freely dotted with red. Green foliage. 4 1/2 feet.

King Humbert. Dark foliage, scarlet flowers. 5 to 6 feet.

Mary Wallace. A rich, soft, crimson pink, flowers of large size, freely produced in great trusses on rigid, upright stalks. Green foliage. 3 1/2 feet.

Mrs. A. F. Conard. Salmon-pink flowers of large size. Green foliage. 4 feet.

Mrs. Kate Gray. Rich orange scarlet, overlaid with gold; flowers large, with immense trusses, foliage bright glossy green; one of the best; 5 feet.

The President. Flowers of immense size, of a rich glowing scarlet produced on strong erect stalks. Green foliage. 3 feet.

Yellow Humbert. Yellow flowers. Green foliage. 5 to 5 1/2 feet.

Wyoming. Orange-scarlet flowers. Dark foliage. 5 to 5 1/2 feet.

All the above varieties, 25c each; 10 for \$2.00; 25 for \$4.50; 50 for \$8.75; 100 for \$17.00.

CARNATIONS

Strong plants for summer flowering. Ready about June 1st.

Beacon. Color a clear, bright glowing scarlet; a continuous bloomer and distinct in color from any other sort.

Enchantress Supreme. A light salmon pink which does not bleach in the full sun and is not liable to split.

Matchless. This new white variety is well named, and well deserved the two gold medals that it won. Comes into bloom early and is a continuous bloomer.

Mrs. C. W. Ward. A perfectly formed, deep pink flower with strong, erect stems 24 to 36 inches in length. A vigorous, healthy grower and early and free bloomer.

All the above varieties, 25c each; \$2.00 for 10; \$18.00 per 100. 3 1/2 inch pots.

COLEUS

Popular bedding plants with beautifully colored foliage. We can supply them in four colors. 15c each; \$1.00 for 10.

POSTAGE.—Prices do not include prepayment by mail or express. If wanted by mail, add for postage within third zone—5c each, or 15c for 10.

Bedding Plants, when sent via Parcel Post, travel exclusively at buyer's risk.

CUPHEA (Cigar Plant)

Platycentra. Interesting bedding plant; the flower is shaped like a hollow cigar; color, scarlet with a black and white tip. 15c each; \$1.00 for 10.

DUSTY MILLER (Cineraria Maritima)

Cut-leaved silvery-green foliage; used for edging. 20c each; \$1.50 for 10.

GERANIUMS

Will always remain a popular bedding plant. We offer the four best varieties.

Naomi. Double pink.

Sheridan. Single red.

S. A. Nutt. Double scarlet.

25c each; \$2.00 for 10. 4 inch pots.

Beaute Poitevine. Finest salmon-pink. 35c each; \$3.00 for 10. 4 inch pots.

HELIOTROPE (Cherry Pie)

Blooms during the whole season; its delightful perfume makes it a desirable bouquet flower; a fine bedding plant.

35c each; \$3.00 for 10.

LANTANA

One of the most desirable bedding plants, constantly in bloom. A dwarf variety for bordering beds; color of bloom, orange-yellow. 20c each; \$1.50 for 10.

MIGNONETTE

A well-known favorite. No garden is complete without a bed of Mignonette. 35c each; \$3.00 for 10.

PANSIES

Choice Mixed. This strain is one of great excellence, the individual flowers being superb and include many fine shades in a number of colorings. 15c each; \$1.00 for 10.

VINCA (Madagascar Periwinkle, or Old Maid)

Ornamental, free-blooming plants and one of the most satisfactory flowering bedding plants we have, blooming until frost.

Rosea. Rose, dark eye.

Alba Rosea. White, crimson eye.

Alba Pura. Pure white.

20c each; \$1.50 for 10.

PETUNIA

For outdoor decoration or house culture few plants equal the Petunia in effectiveness. Easily cultivated, only requiring a good soil and sunny position.

Howard's Star. A beautiful free-flowering strain, crimson-maroon with a clearly defined five-pointed star of bluish white.

Rosy Morn. Carmine-pink with white throat.

Single Bedding Varieties, Mixed Colors.

All the above, 25c each; \$2.00 for 10

Balcony Petunias

A splendid free-flowering type, for bedding, window boxes, vases and hanging baskets.

Balcony Blue. Rich velvety violet.

Balcony Rose. Brilliant rose-pink, very effective.

Balcony White. Pure white flowers, large and borne abundantly until frost.

All the above, 25c each; \$2.00 for 10.

Large Double Mixed. Choice strains of fine colors and large flowers.

25c each; \$2.00 for 10.

SALVIA (Flowering Sage)

Splendens. (Scarlet Sage.) One of the finest summer and fall plants with magnificent brilliant scarlet flowers.

Small plants, 15c each; \$1.00 for 10.

Large Plants, 20c each; \$1.50 for 10.

VERBENAS

They will make a lavish and showy display of flowers until frost.

Fine Mixed. A very satisfactory assortment, containing many fine colors and shades.

15c each; \$1.00 for 10.

HARDY HERBACEOUS PERENNIAL PLANTS

The steadily increasing demand for hardy plants has induced us to make arrangements whereby all the plants we offer are tested to determine their relative merits. Consequently, the amateur or professional gardener may rest assured that all the varieties offered will produce the desired effects, when judgment in arranging and care in planting are observed.

For such of our customers who are not acquainted with the different varieties, we shall be pleased to make suitable selections of the most desirable species, that once planted, with very little care, will keep the garden gay with flowers from the time frost leaves the ground until late in autumn.

All plants are forwarded on receipt of order (weather permitting), unless instructed to the contrary, and are sent by Express, purchaser paying charges. We can forward plants by Parcel Post, and if wanted sent in this way add 5c each, or 30c for 10. Five plants of a kind at ten rate.

ACHILLEA (Milfoil or Yarrow)

Plants suitable for dry, sunny places. The dwarf kinds are useful for carpeting or for rockeries, the taller varieties as border plants

Boule De Neige. (Ball of Snow.) An improved variety bearing pure white flowers of perfect form all summer. Fine for cut flowers. 30c each; \$2.50 for 10.

Eupatorium. Flat heads of brilliant yellow flowers; finely cut foliage. Blooms all summer. 3 to 4 feet. 35c each; \$3.00 for 10.

ACONITUM (Monkshood)

Summer and late autumn-flowering plants with bold spikes of hood-shaped flowers thriving in either sun or shade. The roots are poisonous and should not be planted where the tubers might be mistaken for vegetables

Fischeri. A dwarf variety with pale blue flowers. 18 inches. September. 35c each; \$3.00 for 10.

Napellus. (True Monkshood.) Large dark blue flowers in a raceme. July to August. 3 to 4 feet. 50c each; \$4.50 for 10.

AGROSTEMMA (Rose Campion)

Erect growing plants with silvery foliage and showy flowers during June and July.

Coronaria. (Mullein Pink.) Bright rosy-crimson flowers; 2½ to 3 feet. 30c each; \$2.50 for 10.

AJUGA (Bugle)

A useful plant for the rockery and for carpeting the ground, particularly in shady positions, as under trees where grass will not grow

Reptans Rubra. Grows 3 to 4 inches high, with large spikes of purplish-blue flowers in May. 25c each; \$2.00 for 10.

ALYSSUM (Rock Madwort)

Very popular for beds, borders and winter flowering. Of easiest culture and very free blooming.

Saxatile Compactum. (Basket of Gold, Gold Tuft, Rock Madwort.) A fine plant for the rockery or border, grows 1 foot high and produces broad flat heads of yellow flowers in May. 30c each; \$2.50 for 10.

ANCHUSA ITALICA

Dropmore Variety. Remarkable for its free and continual flowering all summer and the beautiful gentian-blue of its flowers; grows about five feet high.

25c each; \$2.00 for 10.

ANEMONE JAPONICA

(Japanese Wind-flower)

They grow two to three feet high and are in bloom from August till mid-November, furnishing abundant cut flowers and a brilliant display.

Queen Charlotte. Very large, semi-double flowers of La France pink, a color that is rare among hardy plants. 30c each; \$2.50 for 10.

Whirlwind. Large, semi-double, white flowers. 30c each; \$2.50 for 10.

ANTHEMIS (Marguerite)

Tinctoria. Handsome, finely cut foliage, and large, golden yellow flowers produced all summer. Succeeds in the poorest soil. 30c each; \$2.50 for 10.

ANTIRRHINUM (Snap Dragon)

They are undoubtedly one of the best cut flowers which can be grown, while for beds or borders they are a constant source of pleasure, being in flower all the time. Our collection embraces several colors in mixture. Not ready before May 10th. 25c each; \$2.00 for 10.



AQUILEGIA (Columbine)

Charming hardy plants, with distinct clear-cut foliage, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. They thrive well with ordinary garden culture, but do best in partially shaded nooks.

Coerulea. Flowers often three inches in diameter; the outer sepals deep lilac or blue, petals white, the deep blue spur tipped green. 30c each; \$2.50 for 10.

Chrysantha. (Golden Columbine.) Golden Yellow flowers with long spurs. 30c each; \$2.50 for 10.

Long Spurred Hybrids. Beautiful variations from the standard type. 30c each; \$2.50 for 10.

Mrs. Scott Elliot Hybrids. Wonderful colors with very long-spurred flowers. Best mixture grown. Our stock is from seed from this source, absolutely true strain. 30c each; \$2.50 for 10.

Wayside Pink. A beautiful strain of nothing but clear pink colors. We do not think that they can be surpassed. 35c each; \$3.00 for 10.

ARABIS (Rock Cross)

Alpina. A desirable early spring flowering plant, adapted for edging and the rock garden, but does equally well in the border, forming a dense carpet, completely covered with pure white flowers, which last a long time in bloom. 25c each; \$2.00 for 10.

ARMERIA (Sea Pink or Thrift)

Attractive dwarf plants forming evergreen tufts of bright green foliage, from which innumerable flowers appear in dense heads, on stiff wiry stems, from 9 to 12 inches high. They flower more or less continuously from early spring until late in the fall. Very useful in the rockery.

Lauchena Rosea. Bright rose. 3 to 6 inches. 40c each; \$3.50 for 10.

ASCLEPIAS (Butterfly Weed)

Showy native plants about 2½ feet high, blooming during July and August.

Tuberosa. Brilliant orange-colored flowers. 30c each; \$2.50 for 10.

AUBRIETIA (Rock or False Wall Cress.)

One of the daintiest and most delicately beautiful of all dwarf, creeping plants for carpeting beds or rockeries, forming brilliant sheets of blue, crimson or rose for many weeks. Massed on rockeries or in borders with white Arabis and yellow Alyssum, it forms a charming contrast. A gem for planting in crevices of rocks or wall, forming a cataract of color. Mixed colors. 35c each; \$3.00 for 10.

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

HARDY HERBACEOUS PERENNIAL PLANTS—Continued

ASTERS (Michaelmas Daisies or Starworts)

The hardy sorts are entirely distinct from Annual Asters, being smaller in bloom, but produced in greater quantity.

Charm. Very double violet-blue flowers. 40c each; \$3.50 for 10.

Erica. A beautiful clear pink; large double flowers. 40c each; \$3.50 for 10.

Joan Vaughan. Large, semi-double flowers of deepest blue. 40c each; \$3.50 for 10.

Lady Lloyd. A very fine, clear rose pink. Lasts exceedingly well. 40c each; \$3.50 for 10.

Novae-Angliae Roseum Superbum. Color almost red and a profuse bloomer. 40c each; \$3.50 for 10.

Perry's White. The finest white Michaelmas Daisy yet introduced; perfect in habit and remarkably free flowering. 35c each; \$3.00 for 10.

BAPTISIA (False Indigo)

Australis. Grows about 2 feet high with dark green, deeply-cut foliage and spikes of dark blue flowers in June. 30c each; \$2.50 for 10.

BELLIS PERENNIS (English Daisy)

Double Flowering, white and pink. 20c each; \$1.50 for 10.

CAMPANULAS (Bell Flower)

CUP AND SAUCER CANTERBURY BELLS (Campanula Calycanthema)

Large semi-double flowers, each resembling a cup and saucer.

Pink. Beautiful variety with charming pink flowers. 20c each; \$1.50 for 10.

White. Similar to the preceding, but the flowers are white. 20c each; \$1.50 for 10.

Blue. Beautiful light blue flowers. 20c each; \$1.50 for 10.

CARNATION (Hardy Border)

Choice Mixed. Seedlings from seed supplied by a specialist. Strong plants that will furnish an abundance of flowers. 25c each; \$2.00 for 10.

CENTAUREA (Knapweed)

Montana. Large violet blue flower, resembling the Cornflower. Blooms from July to September. 2 feet. 25c each; \$2.00 for 10.

CERASTIUM (Snow in Summer)

Tomentosum. Suitable for the rockery or for covering dry, sunny spots. Low growing plant with silvery foliage and white flowers in June. 25c each; \$2.00 for 10.

CHELONE (Shellflower)

Lyonii. Grows about two feet high and bears numerous spikes of large flower heads of showy purplish red flowers. 30c each; \$2.50 for 10.

CHRYSANTHEMUMS

(Hardy Pompon)

These are becoming universally popular for bedding, as well as for cut flowers. They bloom profusely at a time when so many other flowering plants are destroyed by frost. While they are perfectly hardy they should be planted in a well drained position and protected with a light mulching in winter. Ready for delivery about May 1st.

Large Flowering and Button Varieties

A. Barham. Orange bronze.

Aunt Mary. Deep rose pink.

Bronze Queen. Golden bronze; button.

Champaign. Ruby red; button.

Ermalinda. Bright silvery-pink; button.

Excelsior. Deep bright yellow.

Firebird. Dark red and bronze.

Golden Climax. Deep orange-yellow; button.

Murillo. Beautiful clear pink; button.

Uvalda. Best early pure white.

25c each; \$2.00 for 10.

COREOPSIS

Lanceolata Grandiflora. A beautiful hardy border plant; grows eighteen inches high, and produces its bright golden yellow flowers in great profusion the entire season. 20c each; \$1.50 for 10.



Hardy
Chrysanthemum

DELPHINIUMS

(Perennial Larkspur)

These are deservedly popular. They are perfectly hardy and will establish themselves in almost any garden soil, but respond quickly to liberal treatment. Will begin blooming about the middle of June. If stalks are cut off as soon as flowers fade, they will continue blooming all summer.

Belladonna Hybrids. The freest and most continuous bloomer of all. The clear turquoise-blue flowers are not surpassed by any; 3 feet. 25c each; \$2.00 for 10.

Bellamosa. A dark blue of the type of Belladonna with the color of the old Formosum variety, but not liable to mildew like the latter and of stronger growth. 25c each; \$2.00 for 10.

Gold Medal Hybrids. Unquestionably the finest strain of mixed hybrids ever offered. The plants are of strong, vigorous habit, with large flowers on spikes two feet and over. 30c each; \$2.50 for 10.

DIANTHUS (Hardy Pink)

Allwoodii. New perpetual hardy flowering pinks. They are perfectly hardy and flower continuously from early spring until late in autumn; the flowers are much more substantial and larger than the old type of Hardy Pinks, and are borne on long stems suitable for cutting; deliciously clove scented. 50c each; \$4.50 for 10.

MIXED. Single and double; all colors. Strong field grown plants. 20c each; \$1.50 for 10.

DIELYTRA OR DICENTRA

Spectabilis. (Bleeding Heart or Seal Flower.) An old-fashioned favorite; its long racemes of graceful, heart-shaped pink flowers are always attractive; is perfectly at home in any part of the hardy border, and especially valuable for planting in the shade. 50c each; \$4.50 for 10.

DIGITALIS (Foxglove)

The strong flowerstalks—frequently four to six feet high—rising from rich and luxuriant masses of leaves, always give an appearance of strength to the hardy border.

Giant Shirley Foxgloves. Of extraordinary size and vigor, growing 5 to 6 feet tall, with flower-heads over 3 feet long, crowded with big, bell-shaped blossoms. Colors range from white and shell-pink to deepest rose; many attractively dotted with crimson or chocolate. 25c each; \$2.00 for 10.

Gloxiniaeflora. Finely-spotted varieties. White, purple, rose or mixed. 3 to 4 feet. 25c each; \$2.00 for 10.

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

HARDY HERBACEOUS PERENNIAL PLANTS—Continued

EUPATORIUM (Hardy Ageratum)

A splendid native plant, growing 6 to 10 inches high; immense heads of purplish-pink flowers; fine for naturalizing along streams and ponds, and for planting among shrubbery. *Coelestinum*. Lavender flowers, similar to the *Ageratum*, blooms from August until frost. 35c each; \$3.00 for 10.

FEVERFEW (*Matricaria*)

Little Gem. A most useful border plant and valuable summer cut flower, with large double white flowers; June until October; 18 to 24 inches high. 35c each; \$3.00 for 10.

FUNKIA (Plantain Lily)

The Plantain Lilies are among the easiest plants to manage; their broad, massive foliage makes them attractive subjects for the border, even when not in flower. They succeed equally well in sun or shade.

Subcordata Grandiflora Alba. (White Day Lily, August Lily). Pure white, lily-shaped, fragrant flowers. 25c each; \$2.00 for 10.

Undulata Variegata. Foliage green, striped with white. 25c each; \$2.00 for 10.

GAILLARDIA (Blanket Flower)

Grandiflora. Beginning to flower in June, they continue one mass of bloom the entire summer. Flowers three inches in diameter; center dark reddish-brown; petals orange to crimson. (See cut.) 25c each; \$2.00 for 10.

GEUM

Coccineum. (Mrs. Bradshaw, Chilense.) A splendid new variety, with large double flowers of a fiery red, blooming nearly all summer. 18 inches. 35c each; \$3.00 for 10.

GYPSOPHILA (Baby's Breath)

During August and September the plant is a mass of delicate feathery blooms. These may be used as fresh cut flowers, also for a semi-everlasting effect.

Paniculata. Loose, feathery sprays of white flowers, making a mist-like effect; fine for bouquets. 30c each; \$2.50 for 10.

Repens. A beautiful trailing plant for the rockery, with clouds of small, white, flowers in July and August. 30c each; \$2.50 for 10.

Bristol Fairy. A wonderful new introduction and a great improvement over even the fine Snow White. Bristol Fairy produces much larger panicles of flowers, in which the individual blossom is larger, and of much purer white. Blooms all summer. Strong plants. 75c each; \$7.00 for 10.

GRASSES, Ornamental. (See pages 17 and 62.)

HELENIUM (Sneezewort)

Handsome plants, allied to the sunflowers. Of the easiest culture, forming dense masses of blooms in late autumn.

Autumnale Superbum. Broad heads of deep golden-yellow flowers in late summer. Grows 5 to 6 feet high. 35c each; \$3.00 for 10.

Autumnale Rubrum. A splendid new variety; deep ox-blood-red, changing to terra-cotta. 5 to 6 feet. September. 35c each; \$3.00 for 10.

HELIANTHUS (Hardy Sunflower)

The perennial sunflower is very effective either in borders, among shrubbery, or as clumps on the lawn, etc.

Maximiliana. Flowers in long, graceful sprays during October, when all others have finished flowering; five to seven feet. 35c each; \$3.00 for 10.

HEMEROCALLIS (Yellow Day Lily)

Lily-like plants, which flower in greatest profusion during the summer.

Flava. The best known variety, very fragrant, deep lemon-yellow flowers in June and July. 25c each; \$2.00 for 10.

Dr. Regel. Handsome, rich orange-yellow flowers in May. Very fragrant. Fine for cutting. 1½ feet. 25c each; \$2.00 for 10.

Thunbergii. Bears rich, buttercup-yellow, funnel-shaped flowers in July and August. 25c each; \$2.00 for 10.

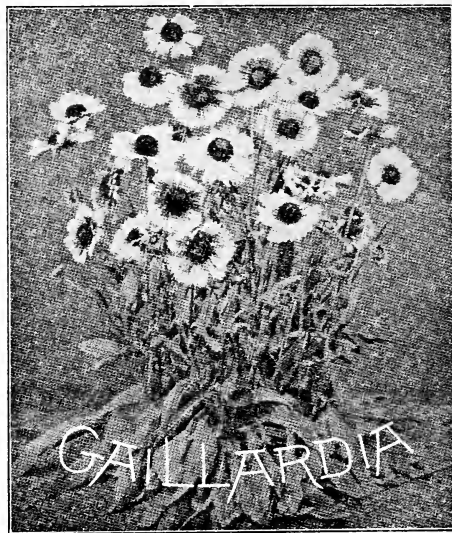
HESPERIS (Sweet Rocket)

Matronalis. Fragrant purple flowers in showy spikes. Desirable for wild garden, shrubbery or mixed borders. 2 to 3 feet; June and July. 30c each; \$2.50 for 10.

HEUCHERA (Alum Root)

Foliage remains close to the ground. During July and August the graceful, thin flower spikes, 12 to 18 inches appear in profusion.

Sanguinea. Bright scarlet. 35c each; \$3.00 for 10.



HIBISCUS (Mallow)

These are a mass of bloom during the entire summer, when they produce large flowers in gorgeous colors.

Mallow Marvels, Giant-flowering. They grow from 5 to 8 feet high, and are very floriferous, blooming from early in July until late in autumn. We offer three distinct colors—red, pink and white—strong roots. 25c each; \$2.00 for 10.

HOLLYHOCK

For planting in rows or in groups on the lawn, or for interspersing among shrubbery, they are invaluable. They require rich, deep soil, well drained.

Newport Pink. Finest pure pink, double flowering variety. 25c each; \$2.00 for 10.

Double, White, Double Rose, Double Yellow, Double Red, Double Mixed. 25c each; \$2.00 for 10.

Single Mixed. A wide range of colors. 25c each; \$2.00 for 10.

IBERIS (Hardy Candytuft)

Sempervirens. Low growing, with evergreen foliage. In spring and early summer is completely covered with dense heads of pure white flowers. 30c each; \$2.50 for 10.

LIBERTY IRIS

(*Iris Germanica*)

JAPANESE IRIS (*Iris Kaempferi*)

Write for Varieties and Prices

IRIS PUMILA

These beautiful little Irises do not grow over 4 inches high, and bloom in April and May. They are fine for bordering flower beds or planting in front of the tall Irises.

Coerulea. Dark violet-blue. 25c each; \$2.00 for 10.

Excelsa. A splendid pale lemon yellow. 30c each; \$2.50 for 10.

Schneecuppe. A large, showy, Pure white. 25c each; \$2.00 for 10.

LAVANDULA (Lavender.)

Vera. This is the true Sweet Lavender; grows about 18 inches high with delightfully fragrant blue flowers in July and August. Should be in every collection of Hardy Perennial Plants. 35c each; \$3.00 for 10.

LIATRIS (Blazing Star, or Gay Feather)

Showy native plants, producing their large spikes of flowers from July to September.

Pycnostacha. Spikes of light, rosy purple flowers; five feet. 25c each; \$2.00 for 10.

LINUM (Flax)

Perenne. A fine plant for the border or rockery; grows 2 feet high, with light, graceful foliage and large blue flowers all summer. 25c each; \$2.00 for 10.

HARDY HERBACEOUS PERENNIAL PLANTS—Continued

LOBELIA (Indian Paint Brush)

Cardinalis. (Cardinal Flower.) Rich, fiery cardinal flowers; strong plants often producing 10 to 18 spikes, 24 to 30 inches long. While they will thrive in ordinary garden soil, they prefer a moist, deep loam, where they will not suffer from drought. In bloom continuously from the middle of July till late in September.

30c each; \$2.50 for 10.

LUPINUS (Lupine)

They grow about three feet high, producing large spikes of flowers, latter part of May and early June.

Polyphyllus. Clear blue. 35c each; \$3.00 for 10.

Albus. A white variety of above. 35c each; \$3.00 for 10.

LYCHNIS

Chalcedonica. A desirable plant, growing two to three feet high; flowers brilliant orange scarlet.

25c each; \$2.00 for 10

LYTHRUM

Roseum Superbum. (Rose Loose Strife.) A strong growing plant three to four feet high, producing large spikes of rose colored flowers from July to September. 25c each; \$2.00 for 10.

MERTENSIA (Blue Bells)

Virginica. An early spring-flowering plant, growing about one to one and one-half feet high, with drooping panicles of handsome, light blue flowers, fading to clear pink; blooming in May and June. 25c each; \$2.00 for 10.

MONARDA (Bergamot)

Showy plants, growing from two to three feet high, succeeding in any soil or position, with aromatic foliage, and producing their bright flowers during July and August.

Didyma, Cambridge Scarlet. (Oswego Tea.) Flowers bright scarlet. 25c each; \$2.00 for 10.

MYOSOTIS

Palustris Semperflorens. Large, rich blue flowers with yellow eye; a charming plant for damp places and a profuse bloomer. 25c each; \$2.00 for 10.

PEONIES

While these are only suitable for fall planting during the months of September, October and November, we have some demand from those who wish to complete their planting designs. For the convenience of those we will be pleased to submit a list of the sorts we can supply.

HARDY PHLOX (Phlox Decussata)

Perennial Phloxes succeed in almost any soil enriched with manure in spring, and in hot weather an occasional soaking of water. If the first spikes of bloom are removed as soon as over, they will produce a second supply of flowers, continuing the display until late in Autumn. These later blooms are often finer than the first. (We offer nothing but strong, 2-year-old plants).

We offer the following collection of extra choice varieties. 25c each; \$2.00 for 10.

Beacon. Brilliant cherry-red.

B. Conte. Fine, rich crimson.

Elizabeth Campbell. Light salmon-pink.

Europa. White with large crimson-carmine eye. Very large flower and truss.

Fuerbrand. Brilliant orange-scarlet.

Jules Sandeau. Large, fine, very free flowering, pure pink.

La Vague. An improvement over older varieties of similar color, with immense, conical heads, borne in great profusion. Warm mauve with emphatic carmine eye.

Mrs. Jenkins. White; immense panicles; free bloomer.

Rheinlander. A beautiful salmon pink, with flowers and trusses of immense size.

Rijnstroom. Lively rose-pink, much like Paul Neyron rose. Immense trusses of flowers.

Thor. A beautiful lively shade of deep salmon-pink, suffused and overlaid with a scarlet glow; has aniline-red eye.

White Lady. Very fine late pure white.

If wanted by mail, add 5c each; 30c for 10 for postage.

PHLOXES OF SORTS

Divaricata Canadensis. It commences to bloom early in April and continues through May, with large, fragrant lavender flowers, on stems 10 inches high. 35c each; \$3.00 for 10.

Subulata. (Moss or Mountain Pink.) An early spring flowering type, with pretty moss-like evergreen foliage, which, during the flowering season, is hidden under the masses of bloom.

Alba. Pure white. **Rosea.** Bright rose. 25c each; \$2.00 for 10.

Suffruticosa. **Miss Lingard.** The best Phlox in cultivation. It produces immense heads of beautiful white flowers in June and blooms again in September and October. Splendid foliage and habit, and free from attacks of red spider. Better results will be had if old flowers are cut off. 25c each; \$2.00 for 10.

PLATYCODON

(Balloon Flower or Japanese Bell Flower)

Grandiflorum. Deep blue, cupped, star-shaped flowers, one and one-half feet. 25c each; \$2.00 for 10.

Mariesi. Deep blue, bell-shaped flowers, nearly three inches across on one-foot-high plants. 25c each; \$2.00 for 10.

PLUMBAGO (Lead Wort)

Larpentae. One of the most desirable border and rock plants. It is of dwarf, spreading habit, growing 6 to 8 inches high; covered with deep blue flowers during the summer and fall. 25c each; \$2.00 for 10.

POLEMONIUM (Jacob's Ladder)

Reptans. (Greek Valerian.) Dwarf, bushy plant of graceful growth with showy blue flowers from April to June. A fine rock garden and border plant growing 8 to 10 inches high. 30c each; \$2.50 for 10.

POPPIES, ORIENTAL (Papaver Orientale)

The proper planting season for Oriental Poppies is from the latter part of August till the end of October. Roots planted in spring seldom live and are usually disappointing to customers. Let us book your order for the following varieties for fall delivery.

Orientale. (Oriental Poppy.) Tremendous scarlet, cup-shaped blooms of brightest crimson-scarlet, with large purplish black blotches at base of petals.

Orientale, Apricot Queen. Large apricot.

Orientale, Beauty of Livermore. Crimson, with black blotch; fine flowers.

Orientale, Mrs. Perry. Orange-apricot; very fine.

Orientale, Perry's White. (New.) The flowers are a fine satiny white with a crimson-maroon blotch at the base of each petal.

PYRETHRUM (Persian or Painted Daisy)

Hybridum. Of easy cultivation in any garden, as they are perfectly hardy. Nothing can surpass them in profusion of flowers from May to July and again later in the season if the flower stems are removed as soon as finished. The plants we offer embrace all the colors from deep red through the various shades of rose to pure white. These can be supplied in mixed colors only. 25c each; \$2.00 for 10.

Uliginosum. (Giant Daisy) Grows four to five feet high, and is covered with large, white, daisy-like flowers three inches in diameter from July to September. 25c each; \$2.00 for 10.

RUDBECKIA (Cone Flower)

A variety of these will furnish a supply of cut flowers from early July until September. They are extremely hardy, doing well with every one. They could be termed "a city garden perennial," doing so well with little attention.

Golden Glow. Double canary yellow flowers; six feet; August. 25c each; \$2.00 for 10.

Newmanni. Single dark orange, with deep purple cone center; three feet high; flowers from July to September. 25c each; \$2.00 for 10.

Purpurea. (Giant Purple Cone Flower.) The flowers remain in perfect condition on the plants for weeks at a time. In fact, we do not know of any other perennial where the flowers last so long in perfect condition. Flowers from July to September; two and one-half feet high. 25c each; \$2.00 for 10.

SALVIA

Azurea. Grows two to three feet high and produces pretty skyblue flowers in great profusion during August and September. 25c each; \$2.00 for 10.

HARDY HERBACEOUS PERENNIAL PLANTS—Continued

SAPONARIA (Soapwort)

Ocymoides Splendens. A fine plant for the rocky or border, producing masses of attractive bright rose flowers; May to August. 8 inches.
25c each; \$2.00 for 10.

SAXIFRAGA (Megasea)

These will thrive in any kind of soil and in any position. Grow about 1 foot high and are admirable for the border or for shrubbery, forming masses of handsome broad, deep green foliage; flowers appear very early in spring. Fine among rocks or ledges.

Cordifolia. Light pink. **Grassifolia,** rosy pink.
40c each; \$3.50 for 10.

SCABIOSA

Japonica. Bears lavender-blue flowers on long stems from July to September. 30c each; \$2.50 for 10.

SCUTELLARIA (Skull Cap)

Baicalensis Coelestina. Short, wiry stems, clothed with clear blue Snapdragon-shaped flowers. 1 foot. June to August. 40c each; \$3.50 for 10.

SEDUM (Stone Crop)

Spectabilis. Erect growing; height 18 inches with broad, light-green foliage and immense heads of handsome, showy, rose-colored flowers. . . . 25c each; \$2.00 for 10.

Spectabilis Brilliant. Similar to the above with bright, amaranth-red flowers. 25c each; \$2.00 for 10.

Seiboldi. Round succulent glaucous foliage; bright pink flowers in August and September.
35c each; \$3.00 for 10.

SHASTA DAISY

Large, snowy-white flowers, in bloom continuously throughout the summer and fall. Height 2½ feet.

Alaska. A decided improvement on the original, very free-flowering, with blooms 4½ to 5 inches across of pure, glistening white. 25c each; \$2.00 for 10.

Mrs. C. Lothian Bell. This magnificent white Marguerite is undoubtedly the largest flowered variety of this class. Flowers frequently measure six inches across with very broad petals of great substance. 2½ to 3 feet.
35c each; \$3.00 for 10.

SIDALCEA

Erect-growing, more or less branching plants, producing their showy flowers during June and July. They will succeed in any garden soil in a sunny position.

Rosy Gem. Pretty, bright rose-colored flowers. 2 to 3 feet. 30c each; \$2.50 for 10.

SPIREA (Goat's Beard, Meadow Sweet)

Elegant border plants with feathery plumes of flowers and neat attractive foliage; succeed best in a half shaded location in rich, moist soil.

Filipendula. (Drop Wort.) Numerous corymbs of white flowers on stems 15 inches high; pretty fern-like foliage. June to July. 25c each; \$2.00 for 10.

Filipendula, fl. pl. (Double Flowered Drop-wort.) Pretty fern-like foliage, with double white flowers on stems 15 inches high during June and July.
40c each; \$3.50 for 10.

STATICE (Great Sea Lavender)

Latifolia. Immense heads, 2 to 3 feet across; small, blue flowers from June to September, which last for months if cut and dried. 25c each; \$2.00 for 10.

STOKESIA (Cornflower or Stokes' Aster)

Cyanea. Produces showy, aster-like, deep blue flowers which measure from 4 to 5 inches across. 18 to 24 inches high, blooming freely from July until frost.
25c each; \$2.00 for 10.

SWEET WILLIAM (Dianthus Barbatus)

Well known hardy plant. We offer a superb strain of mixed single and double-flowering sorts.

Newport Pink. Salmon or watermelon-pink flowers.
25c each; \$2.00 for 10.

THALICTRUM (Meadow Rue)

Dipterocarpum. A pretty and distinct species, with flowers of a charming shade of lilac mauve, which is brightened by a bunch of lemon-yellow stamens and anthers. The plant is of strong growth, about 4 feet high. The dainty flowers are produced in graceful sprays, during August and September.
35c each; \$3.00 for 10.



TROLLIUS (Globe Flower)

Europaeus. Orange Globe. Desirable free-flowering plants producing their giant bright yellow, buttercup-like blossoms on stems 1 to 2 feet high from May until August; succeed admirably in the border in a half shady position in well-drained soil.
50c each; \$4.50 for 10.

TUNICA (Coat Flower)

Saxifraga. A pretty tufted plant with light pink flowers, produced all summer. Useful either for the rocky or border. 25c each; \$2.00 for 10.

VALERIANA (Valerian)

Officinalis. (Hardy Garden Heliotrope.) Produces showy heads of rose-tinted white flowers during June and July with delicious, strong heliotrope odor.
35c each; \$3.00 for 10.

VERONICA (Speedwell)

Longifolia Subsessilis. A pretty species with blue flowers, produced on spikes a foot long, continuing in bloom the entire summer and fall. 35c each; \$3.00 for 10.

Spicata. An elegant border plant, growing about 1½ feet high, producing long spikes of bright blue flowers.
25c each; \$2.00 for 10.

VINCA MINOR (Periwinkle or Trailing Myrtle)

Dwarf evergreen trailing plant, is used for carpeting the ground where it is too shady for other plants to thrive.
25c each; \$2.00 for 10.

VIOLA CORNUTA (Tufted Pansies)

These plants will remain in bloom from May to October, providing they are sheared several times during the season to prevent them going to seed. They are fine for edging the hardy border or garden. Mixed colors.
25c each; \$2.00 for 10.

YUCCA FILAMENTOSA (Adams' Needle)

A hardy ornamental foliage and evergreen plant with long, narrow leaves that are bright green the whole year round. The flowers are white, produced on long spikes.
25c each; \$2.00 for 10.

ORNAMENTAL GRASSES

Eulalia Gracillima. (Japan Rush.) The most beautiful of all the Eulalias, with narrow, graceful foliage, entirely green without variegation, except that the midrib is of a silver sheen.

Eulalia Japonica Variegata. Leaves striped white and green longitudinally.

Eulalia Zebrina. (Zebra Grass.) A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light. . . . 25c each; \$2.00 for 10.

When ordering Perennial Plants sent via Parcel Post, add 5c each or 15c per 10, for postage within third zone.

ROCK AND ALPINE PLANTS

The demand for Rock and Alpine plants has steadily increased until the rockery has become a planting of charm and beauty and is here to stay.

We are offering this select list of plants suited for all kinds of rock gardens.

In making a rock garden there is no set rule, as their making depends on the space and location that the individual can allow. A good garden soil, mixed with one-third sand and one-third leaf mold is suited for most rock plants. If plants are used that require a lime soil, the use of lime will benefit this; if plants are used that require an acid soil, the use of peat or oak sawdust will be of great advantage. Rocks are not essential to the growing of the plants but add to the beauty and charm. The best rocks to use, however, are limestone or sand-stone because they are porous and the moisture in the rock is helpful in dry, hot weather.

We offer Field Grown Plants of the following varieties at 25c each; \$2.00 for 10.

ANCHUSA (Alkanet Bugloss)

Capensis. (Cape Forget-me-not.) A fine free-growing annual variety about 18 inches high with sprays of lovely Forget-me-not blue flowers; blooms all summer.

Anchusa Myosotidiflora. A distinct, dwarf perennial variety from Russia, with clusters of charming blue flowers resembling Forget-me-nots. An effective rock plant for shady places. 1 foot. May-flowering.

ARMERIA

Armeria Cephalotus. Flowers bright pink, in heads to 2 inches across. $\frac{1}{2}$ foot.

Formosa. Flowers rose. 9 inches. Blooms in June.

Lauchean. Bright rosy red. 3 to 6 inches. Blooms in May and June.

Maritima Alba. 3 to 6 inches. Blooms in May and June. Tufts of deep green foliage; white flowers.

ASTERS

Alpinus Albus. Fine dwarf white Aster, bearing large, single white flowers on stems 6 to 8 inches high; excellent for rock gardens. Blooms in May and June.

Diplostiphoides (Dubia). A very fine dwarf Aster for the rock garden, producing early in the season, pale blue flowers. 2 to 3 inches across.

Alpinus. (Goliath). Indispensable for the rockery or edge or hardy borders, grows 6 to 10 inches high, showy bluish-purple flowers in May and June.

Alpinus Rubra. Also good for the rock garden or as an edging plant, producing rose-purple flowers; 6 to 10 inches high. Blooms in May and June.

CALAMINTHA

Alpina. A good rock plant or for the edge of the border, succeeds well in dry ground in a sunny position; small blue flowers in June. 6 inches.

CAMPANULA

Campanulas. (Bellflowers.) Indispensable, hardy garden flowers, of much variety of form, some being of tall and imposing habit, while others are dwarf compact little plants, suitable for edging, rockwork, etc. They like a good, rich soil, and last much longer in bloom if planted in a half shady place.

Carpatia. (Carpathian Harebell.) A pretty species growing in compact tufts, not exceeding 8 inches high; flowers clear blue; held erect on wiry stems. It begins blooming in June, continuing until October. As an edging for a hardy border or for the rockery it is unsurpassed.

Alba. A pure white form of the above.

CHEIRANTHUS

Cheiranthus. Very pretty dwarf hardy biennial plants, usually handled as annuals, flowering freely through the summer from seed sown in spring; for early spring flowering sow in late summer. Splendid for rockery.

Linifolium. (Alpine Wallflower.) Forms compact plants about 9 inches high with numerous small spikes of bright mauve flowers, makes a very neat line.

CHRYSANTHEMUM

Arcticum. (The Arctic Daisy.) Among Fall flowering perennials this is a perfect gem. It forms an attractive rosette-like clump of pretty dark green foliage, and in September multitudes of flower stems appear, terminated by pure white flowers 2 to 2 $\frac{1}{2}$ inches in diameter. These begin to develop during the last week in September, and continue in good condition throughout October, and frequently into November.

DIANTHUS

Deltoides. (Maiden Pink.) A beautiful little plant with narrow leaves, and bearing a profusion of small, crimson flowers during June and July. Easily grown on rockery.

LYCHNIS

Lychnis. (Rose Campion, Jerusalem Cross.) Handsome hardy perennial plants of easy culture.

Haageana. Brilliant orange, scarlet crimson, etc.; in mixture. 1 foot.

Alpina. Flowers pink, 1 to 3 inches across, in dense terminal heads. 1 foot or less.

NEPETA

Nepeta. (Ground Ivy.) Catmint.

Mussini. An excellent plant for any position, but especially useful in the rock garden. Of dwarf, compact habit, producing masses of bloom of a beautiful shade of lavender. 1 to 1 $\frac{1}{2}$ feet.

POTENTILLA

Potentilla. (Cinquifol.) Charming hardy perennial plants for the border, with brilliant single or double flowers, mostly in orange, red and crimson tones, that are produced in profusion from June to August; succeeds in any soil; 18 inches.

Alpretris. Large golden flowers; blooms in May and June; 6 inches.

Formosa. Red; blooms all summer. 8 inches.

Rupestris. White; blooms in May and June. 18 inches.

SEDUM

Sedum. (Stonecrop.) The dwarf varieties are charming plants for sunny positions in the rockery. They thrive in almost any soil. They are especially fond of sand and full sun, and may be considered the backbone of the American rock garden.

Sedum Acre. Creeping evergreen forming mats to 5 inches. Flowers bright yellow, $\frac{1}{2}$ inch across. Blooms in late spring and summer.

Album. Creeping evergreen forming mats, to 8 inches high. Flowers white, $\frac{3}{8}$ inches across. Blooms all summer.

Glaucum. Glaucous-blue foliage densely crowded on the barren shoots. 2 inches high.

Ternatum. Evergreen. Flowers white, $\frac{1}{2}$ inch across. Blooms in late spring. 6 inches.

VIOLA

Violas. (Tufted Pansies.) While the flowers of the Tufted Pansies are not so large as the regular type, yet they bloom so freely that they are superior to pansies where effect is wanted, the colors being particularly clear and distinct; they also bloom for a longer time. Seed sown in April produces flowering plants by June, and from them on until frost they are a sheet of bloom. 8 inches.

Lutea Splendens. Rich golden yellow.

White Perfection. A fine pure white.

Perfection. Purple.

Admiration. Light blue.

ORNAMENTAL FLOWERING SHRUBS

Shrubs are as much a part of the garden as the lawn or flower borders, and a well arranged planting presents an attractive appearance throughout the entire year.

Our Shrubs are transplanted every two or three years and are furnished with plenty of fibrous roots and should not be compared to stock that is never moved from the cutting beds until sold.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

ALMOND. Double Flowering. A desirable class of early flowering shrubs, erect slender branches, covered with small double pink flowers. 2 to 3 feet. \$1.00 each; \$9.00 for 10.

ALTHEA. (Rose of Sharon.) Valuable on account of their late season of blooming, which is from August to October. Are also extensively used as hedge plants. 2 to 3 feet. 60c each; \$5.50 for 10.

Boule-De-Feu. Double red. 2 to 3 feet. 60c each; \$5.50 for 10.

Jeanne D'Arc. Double white. 2 to 3 feet. 60c each; \$5.50 for 10.

Lady Stanley. Double bluish white, crimson center. 2 to 3 feet. 75c each; \$7.00 for 10.

Double Rose, White and Purple. 2 to 3 feet. 60c each; \$5.50 for 10.

BERBERIS THUNBERGII. (Japanese Barberry.) One of the most beautiful shrubs either for hedging or general purposes.

12 to 18 inches. 30c each; \$2.50 for 10.

18 to 24 inches. 40c each; \$3.50 for 10.

24 to 30 inches. 60c each; \$5.50 for 10.

NEW RED LEAVED JAPANESE BARBERRY.

One year plants 75c each; \$7.00 for 10.

Two year plants \$1.00 each; \$9.00 for 10.

Three year plants \$2.00 each; \$15.00 for 10.

BUDDLEYA. (Butterfly Shrub or Summer Lilac.) Variabilis Magnifica. Flowers are the shape and color of lilacs. Flowers all season. 50c each; \$4.50 for 10.

CALICARPA. Purpurea. Clusters of bright glossy, violet-purple berries are borne in September remaining on the plant until mid-winter. 75c each; \$7.00 for 10.

CALYCANTHUS FLORIDUS. (Sweet-Scented Shrub.) Flowers fragrant, double and of a chocolate color. Blooms in April. 1½ to 2 feet. 75c each; \$7.00 for 10.

CERCIS CANADENSIS. (Judas Tree or Red Bud.) All the branches and twigs are covered with a mass of small pink flowers early in the spring, before the leaves appear. 2 to 3 feet. 75c each; \$7.00 for 10.

CLETHRA ALNIFOLIA. (Sweet Pepper Bush.) Dark green foliage and upright spikes of creamy white, fragrant flowers in August. 1½ to 2 feet. 75c each; \$7.00 for 10.

CORCHORUS. (Kerria.) Globe Flower or Japanese Rose. Japonica. Flowers bright yellow, large and showy. 1½ to 2 feet. 75c each; \$7.00 for 10.

CORNUS FLORIDA. (White Flowering Dogwood.) Flowers white and very showy. 2 to 3 feet. \$1.00 each; \$9.00 for 10.

CORNUS FLORIDA RUBRA. (Red Flowering Dogwood.) The flowers are rich, rosy-red. 3 to 4 feet. \$5.00 each;

CORNUS MAScula. (Cornelian Cherry.) Clusters of bright yellow flowers early in spring which are followed by red berries. 2 to 3 feet. 75c each; \$7.00 for 10.

CRAB. (Bechtel's Double Flowering.) Most beautiful of all the flowering Crabs; hardy. Trees are covered in early spring with large beautiful, double, fragrant flowers, resembling small roses of a delicate pink. 3 to 4 feet. \$1.50 each.

DESMODIUM PENDULIFLORUM. A shrub-like plant that dies to the ground in winter, but comes up vigorously in spring. Bears during September sprays of rose-colored flowers. 2 to 3 feet. 60c each; \$6.00 per dozen.

DEUTZIA CRENATA FLORA PLENA. Flowers double white, tinged with pink. 2 to 3 feet. 60c each; \$5.50 for 10.

DEUTZIA GRACILIS. A dwarf bush, covered with spikes of pure white flowers in early summer. 12 to 18 inches. 75c each; \$7.00 for 10.

DEUTZIA LEMOINEII. Habit dwarf, flowers white. One and one-half to two feet. 75c each; \$7.00 for 10.

DEUTZIA PRIDE OF ROCHESTER. Large double white flowers, slightly tinted with rose. 2 to 3 feet. 50c each; \$4.50 for 10.

ELDER, GOLDEN. (Sambucus.) Golden yellow foliage. 3 to 4 feet. 75c each; \$7.00 for 10.

ELAEAGNUS LONGIPES. Nearly evergreen. Yellowish flowers in May, followed by scarlet-yellow berries during summer. 2 to 3 feet. 75c each; \$7.00 for 10.

EXOCHORDA GRANDIFLORA. (Pearl Bush.) The early buds look like pearls, opening up to long gleaming sprays of pure white. 1½ to 2 feet. \$1.25 each; \$11.00 for 10.

FORSYTHIA SUSPENS. (Weeping Golden Bell.) Willowy growth and yellow flowers. 2 to 3 feet. 50c each; \$4.50 for 10.

FORSYTHIA VIRIDISSIMA. (Golden Bell.) Erect growth and spreading branches; flowers bright yellow. 2 to 3 feet. 60c each; \$4.50 for 10.

HYDRANGEA ARBORESCENS STERILIS. (Snowball Hydrangea.) Snowy white bloom; will flower for fully three months; a very showy variety, excellent for borders. (See cut.) 18 to 24 inches. 60c each; \$5.50 for 10.

HYDRANGEA PANICULATA GRANDIFLORA. The flowers which are borne in dense pyramidal panicles in the greatest profusion, are white when they first open but gradually change to rose and remain in good condition for weeks. 18 to 24 inches, 60c each; \$5.50 for 10. 2 to 3 feet, 75c each; \$7.00 for 10.

HYDRANGEA PANICULATA GRANDIFLORA. Standard or Tree-Shaped

Plants. These are four and five years old, trained to tree shape with about three feet of straight stem and nicely shaped heads. Four to five feet. \$2.25 each; \$20.00 for 10.

HYPERICUM AUREUM. (Golden Hypericum.) A dwarf shrub growing to about 3 feet. Foliage bluish green above and paler beneath. Flowers yellow, nearly 2 inches across. Excellent for massing in front of taller shrubs. July and August. 1½ to 2 feet. 75c each; \$7.00 for 10.

LILAC. Purple. (Syringa Vulgaris.) Purple flowers. White. (Syringa Vulgaris Alba.) White flowers. 3 to 4 feet. 75c each; \$7.00 for 10.

Prices of any of the following named Lilacs, fine plants. 2 to 3 feet. \$1.00 each; \$9.00 for 10.

Charles X. Reddish purple flowers.

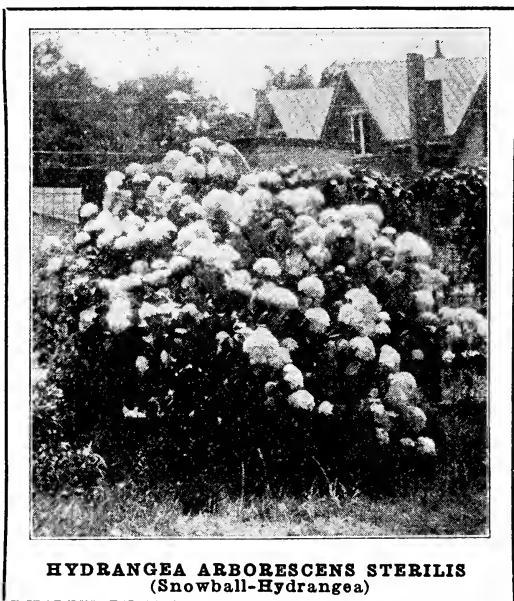
Michael Buchner. Double pale-lilac flowers.

Madame Lemoine. Double white flowers.

LONICEEA. (Bush or Upright Honeysuckle.)

Morrowi. White flowers during May, followed by red fruit during the summer and autumn months. 2 to 3 feet. 60c each; \$5.50 for 10.

Tartarica. (Tartarian Honeysuckle.) Flowers red and white. Fruit red or orange. 2 to 3 feet. 60c each; \$5.50 for 10.



HYDRANGEA ARBORESCENS STERILIS
(Snowball-Hydrangea)

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

ORNAMENTAL FLOWERING SHRUBS—Continued

PHILADELPHUS or **SYRINGA**. *Grandiflorus*. (Large flowered Mock-Orange.) Flowers are pure white and very large. 2 to 3 feet. 60c each; \$5.50 for 10.

PHILADELPHUS VIRGINAL. Produces an immense mass of beautiful white flowers and blooms all summer. 1½ to 2 feet. 75c each; \$7.00 for 10.

PRUNUS PISSARDI. (Purple Leaved Plum.) One of the best of the small red or purple leaved trees, holding much of its color through the summer. Flowers small and pinkish white. 75c each; \$7.00 for 10.

RHODOTYPOS. *Kerrioides*. (White Kerria.) Handsome foliage and large single flowers in the latter part of May, succeeded by numerous black berries. 2 to 3 feet. 75c each; \$7.00 for 10.

REHUS COTINUS. (Purple Fringe, or Smoke Tree.) A low, shrubby tree, covered in midsummer with large clusters of feathery flowers, giving the appearance of a cloud of smoke or mist. \$1.50 each; \$12.50 for 10.

REHUS TYPHINA. (Staghorn Sumac.) This variety will thrive in dry soil, growing to a considerable height. Leaves are dark green, turning to scarlet, purple and orange in the fall. The crimson fruits remain on all winter. \$1.50 each; \$12.50 for 10.

ROBINIA HISPIDA. (Rose Acacia.) A very handsome shrub. The leaves are similar to those of the Locust. In June and July long panicles of rose colored flowers hang from the branches. 2 to 3 feet. 75c each; \$7.00 for 10.

SAMBUCUS Aurea. (Golden Elder.) Attractive golden foliage and desirable to mix with other shrubs. 3 to 4 feet. 75c each; \$7.00 for 10.

SPIREA. A large group of showy, free-flowering, hardy shrubs.

Anthony Waterer. Makes nice, round bushes, three feet; beginning to bloom in summer, continuing until fall. Rose red flowers in large, round clusters all over the bush. 12 to 18 inches. 50c each; \$4.50 for 10.

Billardii. Pink flowers in bloom nearly all summer. It is grand for planting in masses. 2 to 3 feet. 60c each; \$5.50 for 10.

Callosa Alba. A white flowering variety of dwarf, bushy, symmetrical form. Blooms all summer. 18 to 24 inches. 60c each; \$5.50 for 10.

Prunifolia Fl. Pl. (Old Bridal Wreath.) Blooms in May, with pure white, double flowers. 2 to 3 feet. \$1.00 each; \$9.00 for 10.

Reevesii Fl. Pl. Tall, with dark, bluish green foliage, and large, double, pure white flowers in May and June. 2 to 3 feet. 45c each; \$4.00 for 10.

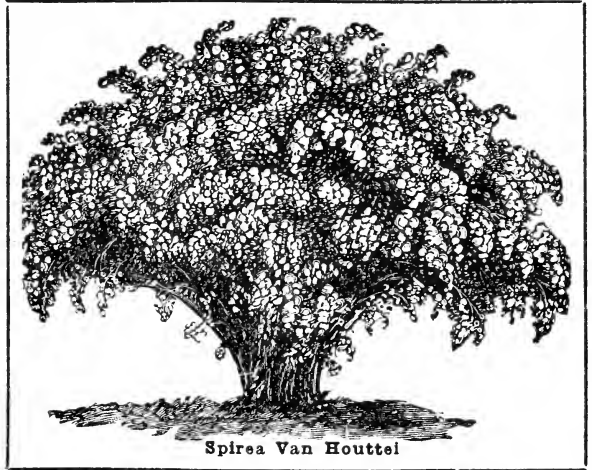
Sorbofolia. (Ash Leaf Spirea.) This shrub at maturity grows from 6 to 15 feet tall and its claim to recognition lies not alone in its perfect hardness, but the unique effect it offers with its delicate green foliage, Mountain Ash like in form but fern-like in texture. Appearing early in the spring, the foliage is a distinct factor in the beauty of the shrub throughout the season. 2 to 3 feet. 75c each; \$7.00 for 10.

Thunbergii. Of dwarf, graceful form. Branches slender and somewhat drooping; foliage narrow and yellowish green; flowers small, white, appearing early in spring. 2 to 3 feet. 75c each; \$7.00 for 10.

Van Houttei. (Improved Bridal Wreath.) This is without a doubt the most beautiful and useful of shrubs. Always effective if planted singly or in groups on lawn, in front of porch, in shrub borders or in a hedge. Handsome throughout the entire season, but when in flower it is a complete fountain of white bloom. Clusters of white florets are set close along the drooping stems. (See cut.) 2 to 3 feet. 35c each; \$3.00 for 10. 3 to 4 feet. 45c each; \$4.00 for 10.

SYMPHORICARPUS Racemosus. (Snowberry.) Flowers white or pinkish, in loose racemes in summer. Berries white, produced in showy, profuse clusters, the branches bending under their weight. 2 to 3 feet. 60c each; \$5.50 for 10.

SYMPHORICARPUS Vulgaris. (Coral-Berry or Indian Currant.) A grand shrub, producing a wealth of red or purplish berries, which remain on the branches all winter. Flowers greenish red in summer. Does well in shade. 2 to 3 feet. 60c each; \$5.50 for 10.



TAMARIX Africana. (Tamarisk.) Strong, slender, tall growing, irregular shrubs, with feathery foliage and small delicate pink flowers in May. 2 to 3 feet. 60c each; \$5.50 for 10.

TAMARIX Hispid Aestivalis. A graceful shrub with upright branches, flowers pink, appearing in July and August. 2 to 3 feet. 75c each; \$7.00 for 10.

VIBURNUM. (Snowballs and High Bush Cranberry.) The Viburnums are one of the most useful shrubs, being very hardy and of good habit. They all have white flowers mostly on flat heads and with a few exceptions are noted for their handsome clusters of berries.

Lantana. (Wayfaring Tree.) This is especially suitable for dry situations and limestone soil. The large, white flower clusters open in May and June and are followed by red fruits, changing to black. 18 to 24 inches. 45c each; \$4.00 for 10.

Opulus. (High Bush Cranberry.) The white flowers in June are followed in autumn by bright scarlet berries, which are very attractive until late in winter. 18 to 24 inches. 60c each; \$5.50 for 10.

Opulus Sterilis. (Guelder Rose or Snowball.) Of spreading habit, bearing flat clusters of single white flowers, which afterwards produce brilliant red berries which hang to the plant all winter; very decorative. 2 to 3 feet. \$1.00 each; \$9.00 for 10.

Plicatum. (Japan Snowball.) One of the choicest hardy shrubs, with healthy dark foliage; the perfect balls of pure white flowers are borne in great profusion in May. 2 to 3 feet. \$1.25 each; \$11.50 for 10.

Tomentosum. (Single Japan Snowball.) A handsome shrub with beautiful, dark green leaves. Flowers white, borne in flat clusters in May. In autumn, foliage turns to a rich crimson. 18 to 24 inches. \$1.00 each; \$9.00 for 10.

VITEX AGNUS-CASTUS. (Chaste Tree.) A tall-growing shrub with extremely showy, dark green, aromatic foliage. Flowers lilac, borne in dense, drooping clusters. A rare shrub and very ornamental for lawn planting. July and August. 2 to 3 feet. 60c each; \$4.50 for 10.

WEIGELIA. (Diervilla.) These shrubs bloom after the lilacs in June and July. Their large flowers are of wide trumpet-shape, colors from white to red, and borne in clusters thickly along the branches.

Candida. White flowering Weigelia, flowering throughout the summer. 2 to 3 feet. 75c each; \$7.00 for 10.

Eva Rathke. The finest Weigelia in cultivation. Flowers continuously throughout the summer and autumn; of an entirely distinct color, being a rich, ruby carmine. Should be in every garden. 2 to 3 feet. 75c each; \$7.00 for 10.

Rosea. A beautiful shrub, with rose-colored flowers in May and June. 2 to 3 feet. 60c each; \$5.50 for 10.

Rosea Nana Variegata. A neat dwarf shrub, valuable for the clearly defined variegation of green, yellow and pink in its leaves; flowers delicate rose and pink; one of the finest variegated-leaved shrubs. 2 to 3 feet. 90c each; \$8.50 for 10.

HARDY CLIMBING PLANTS

THE need of vines for home improvement is well known, and there is absolutely nothing that adds more to the beauty of the home than appropriate vines. A porch without a vine is desolate and incomplete. Vines are exceptionally valuable for turning unsightly fences and buildings into things of beauty.

AKEBIA QUINATA (Akebia Vine)

One of the most graceful of our hardy climbers, with deep green, small foliage, and producing in early spring numberless bunches of violet brown flowers, which have a pleasant cinnamon odor; most desirable for positions where a dense shade is not required. Strong plants, 50c each; \$4.50 for 10.

AMPELOPSIS VEITCHII. (Japan Creeper or Boston Ivy.) This vine undoubtedly stands higher in the estimation of the people than any other. The glossy green leaves turn to a brilliant orange-scarlet in the fall. . . . 50c each; \$4.50 for 10.

AMPELOPSIS QUINQUEFOLIA. (Virginia Creeper.) For covering walls, verandas and trunks of trees. The leaves turn to bright scarlet and purple in the fall. The dark blue berries remain quite late. . . . 50c each; \$4.50 for 10.

ARISTOLOCHIA SIPHO. (Dutchman's Pipe.) Bears brownish-colored flowers, resembling a pipe in shape. Has fine, large, green leaves. . . . 75c each; \$7.00 for 10.

BIGNONIA RADICANS. (Trumpet Creeper.) Should be grown on posts, stumps, etc. Flowers trumpet-shaped, bright scarlet. . . . 45c each; \$4.00 for 10.

CELASTRUS SCANDENS. (Climbing Bitter Sweet.) Hardy ornamental vine with yellow flowers, followed in the autumn with yellow fruit about one-half inch in diameter. . . . 60c each; \$5.50 for 10.

EUONYMUS RADICANS. This vine is adapted for covering low foundation walls. Has deep ever-green foliage and is hardy. . . . 35c each; \$3.00 for 10.

LATHYRUS (Hardy Everlasting Pea.) One of the best

and most desirable flowering hardy climbing plants, attractive both in flowers and foliage, growing to a height of 8 to 10 feet, and producing clusters of large flowers the entire summer; fine for cutting; lasting well. . . . 30c each; \$2.50 for 10.

Latifolius. Deep rosy-red. **Albus.** Pure white. . . .

CLEMATIS (Large Flowering)

HENRYII. This is a robust plant, free bloomer, flowers creamy white, becoming fully expanded when grown in the sun. It blooms through August and September. . . \$1.00 each.

JACKMANII. One of the best-known of all the clematises. The velvety-purple flowers, when expanded, are four to six inches across, very velvety and distinctly veined. . . \$1.00 each.

MAD. ED. ANDRE. This is the nearest approach to a bright red Clematis. It is a very free bloomer and very satisfactory. . . \$1.00 each.

We send out strong, healthy roots of Clematis and cannot entertain any claims for non-success with these plants.

CLEMATIS (Small Flowering)

PANICULATA. This Clematis is by far the most popular of all the species in American gardens. It is extremely showy when covered with the small, white fragrant flowers which appear late in the season. . . 60c each; \$5.50 for 10.

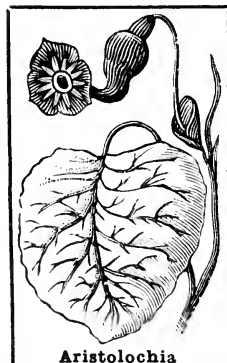
HONEYSUCKLES

MONTHLY FRAGRANT OR DUTCH. Blooms all summer. . . 50c each; \$4.50 for 10.

HALLEANA. (Hall's Japan Evergreen Honeysuckle.) The flowers are white, turning to yellow, and are very fragrant. . . 50c each; \$4.50 for 10.

IVY. English. An invaluable evergreen variety, used for covering walls, etc.; has become very popular for covering graves, especially if in the shade, where grass will not succeed. . . 50c each; \$4.50 for 10.

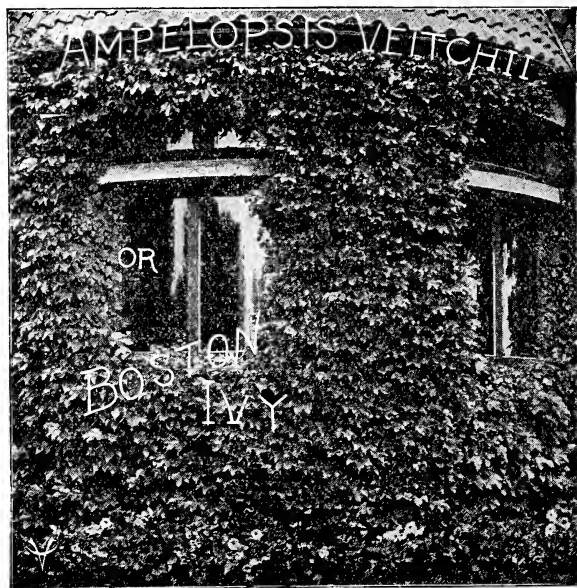
If wanted via Parcel Post Add 5c each or 15c for 10 for postage within Third Zone.



Aristolochia



Clematis



KUDZU VINE. (Jack-and-the-Bean-Stalk.) A rapid growing hardy vine. Bears small racemes of rosy-purple, pea-shaped blossoms towards the end of August. . . 40c each; \$3.50 for 10.

MATRIMONY VINE. The branches may be trained over fences or trellises. . . . 25c each; \$2.00 for 10.

POLYGONUM AUBERTI. (Silver Lace Vine.) One of the most desirable flowering climbers. The plant is of strong, vigorous growth, attaining a height of 25 feet or more, producing through the summer and fall great foamy sprays of white flowers, and a well-established plant during its long flowering period is a mass of bloom. We have received numerous expressions of praise from our customers regarding this vine. . . 75c each; \$7.00 for 10.

VITIS HETEROPHYLLA VARIEGATA. Dark green foliage, variegated with white and pink. . . Each, 30c to \$1.00.

WISTARIA, CHINESE PURPLE. Has pale green pinnate leaves and bears profusely dense drooping clusters of purplish pea-shaped flowers. It blooms in May and usually gives a smaller crop of blooms in August or September. They should be liberally fed when first planted to give them a vigorous start. . . . 75c each; \$7.00 for 10.

WISTARIA CHINESE WHITE. Of similar habit of growth to the above, but with white flowers. . . 75c each; \$7.00 for 10.

TENDER CLIMBING PLANTS

MOON FLOWER PLANTS. 25c each.

If wanted by mail, add 5c each; 50c for 10 for postage.

MADEIRA VINE. Strong tubers. 5c each; by mail, 50c for 10.



Wistaria

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

EVERGREEN TREES

ARBORVITAE AMERICAN (*Thuja Occidentalis*)

They are very quick growers and may be trimmed to any desired height. Fine for hedges.

2 to 3 feet. \$2.50 each.
3 to 4 feet. \$3.50 each.

ARBORVITAE PYRAMIDALIS (*Thuja Occidentalis Pyramidalis*)

Suitable for tubs and forms a tall, slender column of densely branched, dark green foliage. A very graceful tree, having a number of uses.

2 to 3 feet. \$3.75 each.
3 to 4 feet. \$5.00 each.

ARBORVITAE GLOBE (*Thuja Occidentalis Globosa*)

A dense, dark green form of the arborvitae, growing naturally in globe form. Dwarf habit.

1 to 1½ feet \$2.25 each.

IRISH JUNIPER (*Juniperus Hibernica*)

A narrow, columnar form, with upright branches, deep green, tips of branchlets erect.

2 to 3 feet. \$3.50 each.
4 to 5 feet. \$5.00 each.

AUSTRIAN PINE (*Pinus Austriaca*)

This species is very popular for grouping or as specimens.
2 to 3 feet. \$3.50 each.

SCOTCH PINE (*Pinus Sylvestris*)

This grows to be a large tree, 70 to 120 feet in height; quite hardy. 2 to 3 feet. \$3.50 each.

WHITE PINE (*Pinus Strobus*)

A valuable, ornamental, hardy pine, of rapid growth.
2 to 3 feet. \$3.50 each.

DWARF MUGHO PINE (*Mughus*)

This pine is very valuable in habit, with dark brown branches, bright green leaves, stout and acutish. The tree is broader than it is high, forming a dark, dome-shaped bush.
12 to 18 inches. \$3.25 each.

NORWAY SPRUCE (*Picea Excelsa*)

This tree is extensively planted in many of the States. It is of rapid growth, with graceful habits and dark green foliage. It is one of the best conifers to plant for shelter and windbreaks.

1½ to 2 feet. \$1.75 each.
2 to 3 feet. \$3.00 each.
3 to 4 feet. \$4.00 each.

Never an Evergreen Bargain like this!

EVERGREEN COLLECTIONS

Everyone wants Evergreen Trees. Their popularity has increased a hundred fold in recent years. Use them for rockeries, foundation or lawn planting, a whole collection for the usual price of one nursery specimen. These are all twice transplanted, sturdy trees (not seedlings) average age, 5 years. Three collections listed below, delivered by Parcel Post prepaid. Safe arrival guaranteed. Delivery, March 15th to May 1st.

LAWN COLLECTION—\$5.50

- 5 White Spruce, 8 to 10 inches.
- 5 American Arborvitae, 10 to 12 inches.
- 5 Douglas Fir, 8 to 10 inches.
- 5 Mugho Pine, 6 to 8 inches.

FOUNDATION COLLECTION—\$7.25

- 2 Pfitzer Juniper, 10 to 12 inches.
- 2 Mugho Pine, 10 to 12 inches.
- 2 Pyramidal Arborvitae, 12 to 18 inches.

ROCK GARDEN COLLECTION—\$4.25

- 1 Pfitzer Juniper, 8 to 10 inches.
- 1 Savin Juniper, 8 to 10 inches.
- 1 Mugho Pine, 6 to 8 inches.
- 1 Woodward Arborvitae, 10 to 12 inches.
- 1 Douglas Fir, 10 to 12 inches.
- 1 Pyramidal Arborvitae, 10 to 12 inches.
- 1 White Spruce, 10 to 12 inches.
- 1 American Arborvitae, 10 to 12 inches.



American Arborvitae



White Spruce

FRUIT TREES, SMALL FRUITS, GRAPE VINES, ETC.

If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots and setting the trees therein, carefully pack the earth about the roots, taking up when required. Never leave the roots exposed to the sun and air.

SENT BY EXPRESS AT EXPENSE OF PURCHASER.

APPLES—STANDARD

5 to 7 feet high. 75c each; \$7.00 for 10.

SUMMER VARIETIES

- EARLY HARVEST. Pale yellow, fine flavor; August.
- RED ASTRACHAN. Large, crimson, juicy, with rich sub-acid flavor; hardy; July.
- YELLOW TRANSPARENT. Pale yellow; good quality.

AUTUMN VARIETIES

- DELICIOUS. Large, dark red, juicy, aromatic.
- DUCHESS OF OLDENBURG OR DUCHESS. Large, rounded, yellow, striped red, tender, juicy.
- FALL RAMBO. Yellow, streaked with red.
- MAIDEN'S BLUSH. Large, beautiful blush cheek.

WINTER VARIETIES

- BALDWIN. Large, dark red; productive.
- BANANA. Large, golden yellow, shaded crimson.
- ENSEE. Bright red in color and a splendid keeper.
- GRIMES GOLDEN. Medium to large, skin golden yellow, flesh crisp, tender, juicy; long keeper.
- JONATHAN. Medium, red and yellow, flesh tender, juicy.
- NORTHERN SPY. Large, striped red; good keeper.
- ROME BEAUTY. Large, yellow, shaded red, tender.

WINTER VARIETIES (Continued)

- STAYMAN'S WINESAP. Fruit medium size, mostly covered with red on a yellow ground; flesh fine, crisp, juicy.
- WINESAP. Medium, deep red, rich, sub-acid.
- YORK IMPERIAL. Medium, yellow, shaded red, firm, juicy, sub-acid; an excellent shipping apple.

ONE YEAR OLD APPLE TREES

Of the Above Varieties

3 to 4 feet high, 35c each; \$3.00 for 10; 25 for \$7.00; 50 for \$13.00; 100 for \$25.00.

CRAB APPLES

5 to 7 feet high. 90c each; \$8.50 for 10.

- HYSLOP. Deep crimson; very popular on account of its large size, beauty and hardness.
- TRANSCENDENT. Skin yellow, striped with red.

QUINCES

3 to 5 feet high. \$1.00 each.

- APPLE OR ORANGE. Large, bright golden yellow, fine quality; flesh firm, cooks tender; October.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

FRUIT TREES, GRAPE VINES AND SMALL FRUITS—Continued

CHERRIES

HEART AND BIGARREAU (Sweet)

4 to 6 feet, first-class. \$1.00 each; \$9.00 for 10.

BLACK TARTARIAN. Very large, purplish-black, juicy rich, excellent, productive; last of June.

GOVERNOR WOOD. Large, light red, juicy, rich, delicious; tree healthy and productive; June.

YELLOW SPANISH. Large, pale yellow with light red cheek; late June.

DUKE AND MORELLO (Sour)

4 to 6 feet, first-class. \$1.00 each; \$9.00 for 10.

DYEHOUSE. A very early and sure bearer; ripens a week before Early Richmond; fine quality; June.

EARLY RICHMOND. Medium, dark red, fine quality.

ENGLISH MORELLO. Dark red, rich, acid, juicy, and good. Late July.

PEACHES

4 to 5 feet. 60c each; \$5.00 for 10.

CHAMPION. Creamy white with red cheeks, freestone, excellent quality; early in August.

CRAWFORD'S EARLY. Large, yellow, of good quality, freestone; early in September.

CRAWFORD'S LATE. Large, yellow with red cheeks, freestone; last of September.

ELBERTA. Large, yellow with red cheek, flesh yellow, firm, juicy, of high quality; very prolific; September.

HEATH CLING. Large, flesh white, juicy and melting; October.

J. H. HALE. Deep golden yellow overlaid with bright carmine. Large size and productive.

OLD MIXON FREE. Large, yellow with red cheek; September.

PEARS—STANDARD

5 to 7 feet, first-class. \$1.00 each; \$9.00 for 10.

BARTLETT. Large, clear yellow, juicy. August.

FLEMISH BEAUTY. Fruit is large, skin pale yellow, flavor sweet and melting; September and October.

KIEFFER'S HYBRID. Large, rich color and good quality.

SECKEL. Small, yellowish brown; one of the best.

PLUMS

STANDARD ON PLUM STOCKS

5 to 7 feet. \$1.00 each; \$9.00 for 10.

ABUNDANCE. Large, yellow with heavy bloom, good quality; very prolific.

BURBANK. The largest and best variety; color red; excellent quality; hardy and vigorous grower.

RED JUNE. Large, red, fine quality; strong, vigorous grower; finest extra early plum.

SHIPPER'S PRIDE. Large, purple, fine, juicy and sweet.

YELLOW EGG. A beautiful yellow, egg-shaped plum of large size, flesh yellow; late August.

BLACKBERRIES

75c for 10; \$5.00 per 100.

The Blackberry is one of the most profitable fruits to grow when properly managed, as it thrives well in almost any soil, but reaches perfection in a strong loam tending towards clay.

Ancient Briton. Large fruit, stems loaded with good sized berries of fine quality; vigorous grower, one of the best.

Eldorado. Large fruit, borne in large clusters and ripen well together, fine quality; good keeper.

Mersereau. Extremely hardy, berries large, extra quality, sweet, rich and melting without core; good keeper and shipper; vigorous grower.

Taylor. Medium-sized fruit of fine flavor, extremely hardy and very productive; ripens late.

CURRANTS

Two-Year-Old Plants

A cool, moist soil is best adapted to the growth of Currants. Strong, moist loams with a considerable mixture of clay, are good. Even well-drained, stiff clay will give good results.

Cherry. Large, bright red berries, with a thin skin and fine flavor. 30c each; \$2.50 for 10.

Perfection. A new red variety which promises to eclipse all other sorts, combining size, color, high quality and productiveness. 40c each; \$3.50 for 10.

White Grape. Best white variety. 30c each; \$2.50 per 10.

SUITABLE DISTANCES FOR PLANTING SMALL FRUITS AND GRAPE VINES

Blackberries, 5 to 7 feet. Currants, 3 to 4 feet.
Raspberries, black, 4 to 5 feet. Strawberries, 1 ½ x 3 ½ feet.

We do not guarantee or replace Plants, Shrubs or Trees at prices quoted.

DEWBERRY

Lucretia. One of the low-growing, trailing blackberries. It has proved highly satisfactory wherever tried, and many say it is the best of all the blackberry family. \$1.00 for 10; \$6.00 per 100.

GOOSEBERRIES

Two-Year-Old Plants

The best results are obtained by planting in moist, but not soggy, clay loam, but they will do reasonably well in any well drained soil if they are well fertilized once each year.

Downing. Large, pale green, and of splendid quality for both cooking and table use. 30c each; \$2.50 for 10.

Houghton's. Small to medium: roundish, oval, pale red, sweet, tender. 25c each; \$2.00 for 10.

Industry. Berries of largest size, excellent flavor, pleasant and rich, dark red color when fully ripe; strong upright grower; an immense cropper. 25c each; \$2.00 for 10.

Smith's Improved. Large, pale, greenish yellow, skin thin, of excellent quality. 25c each; \$2.00 for 10.

GRAPE VINES

ALL TWO-YEAR-OLD SELECTED STOCK

Grape vines will grow almost anywhere, but they should be carefully cultivated and pruned.

BLACK OR PURPLE GRAPES

***Concord.** Large, black grape, hardy and productive; juicy and sweet. 15c each; \$1.25 for 10.

Ives' Seedling. Dark purple, sweet. 20c each; \$1.50 for 10.

Moore's Early. Ripens ten days earlier than Concord; bunch and berry round and large. 20c each; \$1.50 for 10.

RED GRAPES

***Catawba.** Berries large, round; when ripe a dark copper color, sweet, rich. 30c each; \$2.50 for 10.

Delaware. Small, light red, thin skin; very juicy, sweet, sprightly. 30c each; \$2.50 for 10.

WHITE OR YELLOW GRAPES

***Niagara.** Bunch and berries large, light greenish white, slightly ambered. 20c each; \$1.50 for 10.

Pocklington. Bunch and berry very large; attractive, golden yellow color. 25c each; \$2.00 for 10.

Varieties marked with * are best for arbors.

RASPBERRIES

They will do well in any good soil, but thrive best in deep, moist (not over wet) soil. The lighter loams are preferable for the red varieties, while the heavier loams suit the black varieties best.

The following varieties are all 75c for 10, \$4.50 per 100.

Cardinal. Produces a fine quality of dark red or almost purple berries through a long season.

Cumberland. The largest black cap; a healthy, vigorous grower; very productive.

Cuthbert. Large, firm, deep rich crimson, of excellent quality, tall, strong and vigorous.

St. Regis. The berries are a bright crimson, of large size and surpassing quality—rich, sugary with full raspberry flavor.

STRAWBERRIES

Strawberries will do well in any soil that will grow good corn. Soil should be made fine and loose. A generous supply of well rotted manure incorporated in the soil is of great benefit.

EVER-BEARING STRAWBERRY

Mastodon. Has no equal as to quality, productiveness, and hardness of plants. Quality of the fruit is of the very best. Size much larger than any other fall-bearing variety. 60c for 10; \$2.50 per 100.

The following varieties are all 25 for 50c.

\$1.25 per 100.

Aroma. One of the finest for long-distance shipping. The large berries are bright red to the center, of conical shape with prominent and attractive yellow seeds.

Gandy. One of the best late varieties. Berries large, of fine form and excellent quality.

Glen Mary. Large to very large, sometimes flattened; sweet, rich, delightful.

Senator Dunlap. Exceedingly vigorous. Fruit large, regular and attractive in form, deep red to the center; firm in substance.

Gooseberries, 3 to 4 feet. Raspberries, red, 3 to 4 feet.
Strawberries, in beds, 1 ½ x 1 ½ feet. Grapes, 8 to 10 feet.

TREES, SHADE AND ORNAMENTAL

FOR LAWN, STREET AND FOREST PLANTING

ASH. American white. A handsome, hardy, broadheaded tree. 8 to 10 feet. **\$1.00** each.

CATALPA SPECIOSA. A handsome, rapid growing tree. 6 to 8 feet. **\$1.50** each.

CATALPA BUNGEI. (Umbrella Catalpa.) 6 to 7 feet. 1 year heads. **\$2.00** each; 2 year heads, **\$3.00** each.

ELM. American. A hardy, rapid grower; resists drought and is long lived. 6 to 8 feet. **\$1.50** each.

LINDEN. European. This is probably the largest leaved Linden. 6 to 8 feet. **\$3.00** each.

MAGNOLIA. Glauca. (Sweet Bay.) White, very fragrant, flowers about 3 inches in diameter. Blooms in May and June. 2 to 3 feet. **\$3.75** each.

MAGNOLIA. Purpurea. Large fragrant, tulip shaped flowers, purple outside, white within. April. 2 to 3 feet. **\$12.00** each.

MAGNOLIA. Soulangeana. Large flowers like the M. Glauca, but with purple-tinted petals. 2 to 3 feet. May and June. **\$15.00** each.

MAPLE. Norway. A large, handsome tree with a compact rounded head of spreading branches. 8 to 10 feet. **\$3.75** each.

MAPLE. Rock or Sugar. An excellent shade tree of upright, dense growth. Grows to a large size and is long lived. 8 to 10 feet. **\$3.00** each.

MAPLE. Silver or Soft. Has wide, slender, spreading branches and thrives almost anywhere. 8 to 10 feet, **\$2.00** each; 10 to 12 feet, **\$2.25** each.

MOUNTAIN ASH. European. A hardy tree; head dense and regular, beautiful fern-like foliage; covered from July till winter with clusters of bright red berries. 6 to 8 feet. **\$3.00** each.

OAK. Red. A tree of rapid growth, growing into a large, majestic tree, the foliage turning dark red in fall. 4 to 6 feet. **\$2.25** each.

OAK. Scarlet. A noble tree with spreading branches; leaves turn scarlet in fall. 6 to 8 feet. **\$3.00** each.

OAK. Pin. Tree is fibrous rooted, transplants well and grows rapidly. Foliage turns bright red in fall. 6 to 8 feet. **\$2.25** each.

PEACH. Flowering, Red and White. At its blooming time in May every twig and branch is bright with beautiful formed flowers. 3 to 4 feet. **\$2.50** each.

POPLAR. Carolina. One of the surest and most rapid growing trees. 8 to 10 feet. **\$1.50** each.

POPLAR. Lombardy. With age this tree becomes picturesque. 8 to 10 feet, **\$1.25** each; 10 to 12 feet, **\$1.50** each.

SYCAMORE. Plantanus Orientalis. (Oriental Plane.) Very hardy and does well in moist places. Thrives in smoky cities, making it a good tree for city planting. 6 to 8 feet. **\$1.50** each.

TULIP TREE. (Liriodendron Tulipifera.) Tall, hardy tree of pyramidal habit and rapid growth. Bears flowers of a creamy-yellow and orange color in June. 6 to 8 feet. **\$2.25** each.

WATER LILIES

NOTHING equals a water lily pool for giving interest and distinction to the garden. A natural pond is not required in fact an artificial one is better, as it can be better kept to the same level. And a natural pond is likely to be fed by a cold spring which is injurious to many of the water lily plants. It should have full sunlight; a water lily pond under the shade of trees will be a disappointment if you want the plants to bloom. Plant the water lilies in boxes or tubs, they will do better and can be better handled. A box two feet square, or diameter, is as small as you can have for the plants to do well; this should be about ten inches deep, but a larger box is better. The soil should be a heavy loam, or a clay will do, mixed with one-third to even one-half well-rotted cow manure and a little bone meal.

Goldfish are an essential adjunct of the lily pond, both as an ornament and to eat up some of the insect life. People will ask, what do you do with them in winter time? Do nothing. If the pond does not freeze to the bottom they will take care of themselves and go to sleep in the mud; they can not be seen, but a few warm sunny days will bring them into view again.

AURORA. Flowers are rosy yellow on the first day, red-orange on the second and deep red on the third day. The stamens are orange-red and the leaves are mottled with brownish red. **\$2.00** each.

CHROMATELLA. The clear, rich yellow of Chromatella makes it by far the best yellow variety grown. The broad petals are canary yellow, the stamens are of a deeper shade and altogether, this combination displayed among the leaves beautifully marbled in deep green and brown, make it a picture indeed. Fortunately the Chromatella propagates rapidly so that it continues to remain a moderate priced Nymphaea and the basis of several fine collections. **\$2.00** each.

GLADSTONE. The king of the whites, surpassing all other white Nymphaeas in size and freedom of bloom. The flower is a pure dazzling white 6 to 8 inches across, fairly sparkling in pure brilliancy. Petals are broad and concave in pleasing contrast to the sulphur yellow of the stamens. **\$1.50** each.

GLORIOSA. A truly remarkable red, giving such universal satisfaction that we recommend it as the basis of every collection. It will thrive under extreme conditions. Is thoroughly at home in pool or lake, and its characteristic small leaf-spread and large blossoms make it an ideal plant for tub culture. The floating blossoms of apple blossom fragrance are often 6 to 7 inches across, perfect in form, and rather double. The color deepens on successive days and the bright carmine of spring-time becomes a dark current-red later in the season. The excellent qualities persist in the cut flowers which continue to open for five days when floated in bowls. This attractive feature of Water Lilies is often overlooked,

though cutting the blooms stimulates their production just as it does in the case of many other plants. Gloriosa, without a doubt, sets a standard among hardy lilies. This brief description does not do justice to its superior excellence. According to many of our customers it "blooms and blooms, and is just lovely." **\$5.00** each.

JAMES BRYDON. A superb variety, being a free-grower with rosy crimson flowers 4 to 5 inches in diameter. **\$3.00** each.

MARLIACEA ROSEA. Flowers large, deep rose color, young leaves purplish-red, changing to deep green. A free and continuous bloomer. **\$2.00** each.

ODORATA. This is the fragrant Pond Lily of the United States; flowers white, 3 to 5 inches in diameter, stamens yellow, leaves dark green above, under surface deep red to reddish green; splendidly adapted for planting in quantity in natural ponds. **30c** each; **\$2.50** for 10.

TUBEROSA ROSEA. Flowers an exquisite shade of pink, standing above the water. A good vigorous grower, without being rank; a free bloomer. **\$1.00** each.

TUBEROSA RICHARDSONI. Flowers pure white and quite double, the stamens being converted into petals which are more or less fluted in the centre. The flowers stand well above the water, the sepals and outer petals drooping, forming immense snowball-like flowers, 8 inches in diameter. **\$1.00** each.

Water Lily Roots should be sent via express; if wanted by mail at purchaser's risk, remit 5c each, or 30c for 10. Climbing Plants should go via express; if wanted by parcel post, add 5c each, or 30c for 10 for postage. Ready for delivery about the middle of May, weather permitting.

SUMMER FLOWERING BULBS AND ROOTS

AMARYLLIS

PLANT in equal parts sandy loam and leaf mould. If convenient, start in hotbed, beginning with fifty degrees of heat, increasing to sixty or seventy. When the leaves appear, water carefully and not in too great quantity. The Rosea planted in May makes rich and showy border plants.

Equestris. Flowers scarlet with broad, white stripes, extending from the throat to half-way up the segments... **25c each; \$2.50 per doz.**

Rosea. (Zephyranthus.) Flowers all summer. Small, delicate pink. **15c each; \$1.50 per doz.**

Johnsonii. Large flower, crimson-scarlet striped with white. **50c each; \$5.00 per doz.**

Giant American Hybrids. The flowers are exceedingly rich in colors and markings, spikes are usually from two to three feet in height, bearing from three to five enormous trumpet-shaped flowers. **50c each; \$5.00 per doz.**



Amaryllis Johnsonii

CALADIUM ESCULENTUM

(Elephant's Ear)

ONE of the most effective plants in cultivation for the flower border, or for planting out upon the lawn. It will grow in any garden soil, and is of easiest culture. It should be planted in a rich compost, where it will obtain plenty of water. Foliage light green. (See cut.)



Caladium

- No. 1 Size.** Small bulbs, **10c each; \$1.00 per doz.** By mail, **12c each.**
- No. 2 Size.** Large bulbs, **15c each; \$1.50 per doz.** By mail, **20c each.**
- No. 3 Size.** Extra large bulbs, **25c each; \$2.25 per doz.** By mail, **30c each.**
- No. 4 Size.** Selected extra large, **35c each; \$3.50 per doz.** By mail, **35c each.**
- No. 5 Size.** Monster bulbs, **60c each; \$6.00 per doz.** By mail, **70c each.**

BEGONIAS, HARDY

Exceedingly useful plants for the garden; good for shady places. Lustrous bronze-green foliage with small pink flowers **25c each; \$2.50 per doz.**

BEGONIAS, TUBEROUS-ROOTED

THEY are now used extensively for outdoor planting. Give them a partially shaded position in a light soil and well-drained location, and they will give more bloom than any other plant which will grow in such a place. A soil that will grow it to perfection is turfy matter scraped from the bottom of old sod—one part, and one part sand. Mix these well together, and you have a compost that is friable, porous, and well adapted to any plants having fine, fibrous roots. It is more satisfactory to apply plant-food when needed, and in such quantities as seem to be required, than to make the soil very rich from the start. Water very cautiously until active growth begins, then increase the amount. But at no time during its existence will the plant require more than enough to make—and keep the soil moist all through. Good drainage should be provided to guard against over-watering.

DOUBLE FLOWERING VARIETIES

- Double.** Crimson, rose, scarlet, white and yellow, in separate colors..... **30c each; \$3.25 per doz.; \$22.50 per 100.**
- Double, Mixed..... 25c each; \$2.75 per doz.; \$20.00 per 100.**

SINGLE FLOWERING VARIETIES

- Single.** Crimson, rose, scarlet, white and yellow, in separate colors. **25c each; \$2.75 per doz.; \$20.00 per 100.**
- Single, Mixed..... 20c each; \$2.25 per doz.; \$17.00 per 100.**



Begonias Tuberous-Rooted

CANNAS, ROOTS

Select Large-Flowering

THEY do well in all sections of the country, and stand pre-eminently at the head of the list, succeeding in any sunny position in any kind of soil, but responding quickly to liberal treatment. Cannas should be planted in good, rich garden soil by the end of May, when danger from frost is past. Water sparingly for first two weeks after planting. When growing freely water liberally. Should be planted about 18 inches apart each way, and if more than one kind is used be careful to plant the taller growing kinds in the center and the dwarf ones along the edge. This applies to planting in beds.

Named Varieties

Canary Bird. Pure Canary yellow flowers; borne on very healthy rich green foliage. 4 feet.
12c each; \$1.00 per doz.; \$8.00 per 100.

City of Portland. The flowers are of the largest size, borne on heavy trusses. Color a glowing shade of pink, foliage rich green color. 3 ½ feet.
12c each; \$1.00 per doz.; \$8.00 per 100.

David Harum. Brilliant scarlet, dark foliage; 3 feet.
10c each; 75c per doz.; \$6.00 per 100.

Eureka. The best white Canna; the large flowers are freely produced on strong vigorous plants; 4 feet. 10c each; 80c per doz.; \$6.50 per 100.

Galety. Orange, mottled with carmine and edged with yellow. The tongue is yellow and densely spotted with carmine. 5 feet.
10c each; 80c per doz.; \$6.50 per 100.

Golden Gate. The flowers open almost pure gold but soon become richly rayed with orange crimson and apricot centering to the throat. 4 feet. 10c each; 75c per doz.; \$6.00 per 100.

Gladiator. Deep yellow freely dotted with red; green foliage. 4 ½ feet.
10c each; 75c per doz.; \$6.00 per 100.

Humbert. The flowers measure 6 inches in diameter, produced in gigantic trusses, a brilliant orange-scarlet with bright red markings; foliage broad and massive, of a rich, coppery-bronze; 4 to 5 feet. 10c each; 80c per doz.; \$6.50 per 100.

Hungaria. Large flowers, borne in trusses of immense size. Color a pure La France pink with satiny sheen. The most popular pink; green foliage; 3 ½ feet. 12c each; \$1.00 per doz.; \$8.00 per 100.

President. Flowers of immense size of a rich, glowing scarlet produced on strong, erect stalks well above the green foliage; 3 ½ feet. 10c each; 80c per doz.; \$6.50 per 100.

Rosea Gigantea. Large flowers, borne in such abundance that the mass of color is amazing. A deep, rich rose, almost a coral-carmine; green foliage; 4 feet. 15c each; \$1.25 per doz.; \$9.00 per 100.

Yellow Humbert. Has the same habit of growth as the Humbert. Has green foliage and produces yellow flowers, dotted with red; 4 to 5 feet. 10c each; 80c per doz.; \$6.50 per 100.

Mixed Varieties. Dormant roots.

10c each; 60c per doz.; \$6.00 per 100. (By mail, 80c per doz.)



CANNA PLANTS

See page 57

CALLA, SPOTTED

Golden Yellow. (Richardia Elliottiana.) This is the best of the yellow Callas, its flowers being as large as the popular white variety, but of a rich, lustrous golden-yellow of velvety texture; the foliage is dark green, with translucent creamy-white spots, which add much to its beauty. 30c each; \$3.00 per doz.

HYACINTHUS CANDICANS

(Cape Hyacinth)

A white summer-flowering Hyacinth, growing 3 to 5 feet in height, gracefully surmounted with from 20 to 30 pure white, bellshaped flowers.
20c each; \$2.00 per doz.

MADEIRA, or Mignonette Vine

A RAPID-GROWING vine, covering a large space in a short time. Fleshy, heart-shaped leaves of a light green and numerous racemes of feathery flowers of delicious fragrance.

5c each; 40c per doz.; \$3.00 per 100.

DAHLIAS

THE Dahlia is one of the most important Summer and Autumn flowers. Commencing to flower in July, they are a perfect blaze of bloom until stopped by frost. Especially fine for cut flowers. One of the most important points in the cultivation of the Dahlia is to select a well-drained position where they will receive the full benefit of the sun during the greater part of the day. As to soil, they are not at all particular, except that in the case of a stiff clay some loose material should be added, such as coarse sand, Peat Moss, or anything which will make the soil loose and friable. The soil must be deeply dug, if possible to a depth of two spades, and a liberal amount of suitable plant food incorporated. For this nothing is more satisfactory than well-decayed stable manure, but where this can not be conveniently procured, pure bone meal, sheep manure, or Vigoro, which is rich in ammonia and phosphoric acid.

The planting of dormant roots in the latitude of Cincinnati may be done at any time between April 25th and June 15th, the earlier planting being preferable. Plant the bulbs three inches below the surface of the ground, laying the bulb on its side. Do not crowd your plants, but plant at a distance of not less than two and one-half or three feet, and as soon as the shoots appear, remove all but two or three of the strongest, and these, when about a foot high should be secured to stout stakes.

Keep free from grass and weeds, and water regularly in dry weather.

Show or Ball Dahlias

Are perfectly full, rounded, regular form, cupped or quilled petals and solid color, or tipped darker than the ground color. (See cultural directions.)

- Apollyon.** Vivid vermilion red, a profuse bloomer. 40c each; \$4.00 per doz.
Crimson Globe. Bright crimson 40c each; \$4.00 per doz.
Clara Seaton. Large yellow, suffused golden buff quilled petals..... 75c each; \$7.50 per doz.
Maude Adams. Flowers white, overlaid with soft pink. Very early and free bloomer..... 40c each; \$4.00 per doz.
Mary Pickford. Primrose yellow tipped with old rose. 40c each; \$4.00 per doz.
White Swan. Pure white, large and fine; the hardiest and easiest grown, long stem. 40c each; \$4.00 per doz.

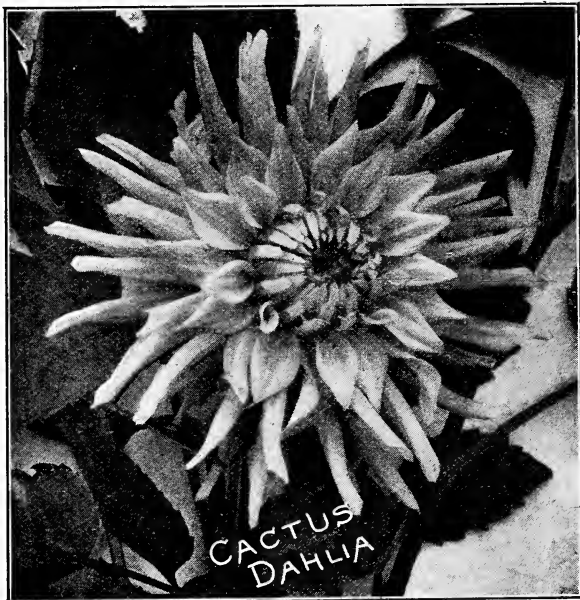
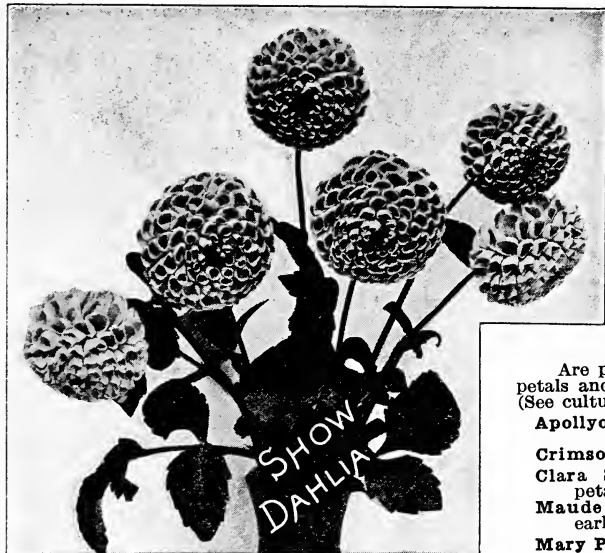
Cactus Dahlias

- Countess of Lonsdale.** Yellow flowers suffused with salmon-red and overlaid with lavender. 40c each; \$4.00 per doz.
Mrs. C. H. Brecht. Pale yellow, suffused with carmine; free bloomer on long stems. 40c each; \$4.00 per doz.

Decorative Dahlias

MANY beautiful varieties of Decorative Dahlias have been introduced in recent years, and in the following varieties some will be found with flat petals reflexed, while others will be curiously twisted and incurved. (See cultural directions for Dahlias.)

- Amun Ra.** Wonderfully distinct both in color and formation, and while a giant in size, is without coarseness, it being perfect in shape. The outer petals are copper and orange tones shading to gold and amber, deepening in the centre to a dark reddish brown. 75c each; \$7.50 per doz.
California Cream. Large creamy yellow flowers, profuse bloomer; long stems. 35c each; \$3.50 per doz.
Jack Rose. Bright carmine, overlaid violet, resembling the color of the rose of the same name. 40c each; \$4.00 per doz.
Jean Kerr. This is the most valuable of all white Decorative Dahlias. The medium-sized blooms are carried on long, strong stems well above the foliage. Blooms very early and exceedingly free. 40c each; \$4.00 per doz.
Jean Chazot. 5 feet high; golden bronze with nasturtium red suffusion..... 40c each; \$4.00 per doz.
Jersey Beauty. 6 feet; a fine large full pink. 75c each; \$7.50 per doz.
Mrs. I. De Ver Warner. Artistic, well-shaped flowers of immense size. A superb shade of mauve-pink. The plants make a strong upright growth and bloom profusely..... 50c each; \$5.00 per doz.
Millionaire. Lavender pink, tinting to white at center. 75c each; \$7.50 per doz.
Paul Michael. One of the sensational large exhibition flowers that always attracts attention, petals quilled at base, curled and twisted, color pure gold, shaded orange-buff at centre, very free-flowering. 60c each; \$6.00 per doz.
Pride of California. A brilliant, glowing cardinal-red, of good size, very free and wonderful keeper as a cut flower, the best of its color. 60c each; \$6.00 per doz.
Queen of Whites. Beautiful large white. 60c each; \$6.00 per doz.
Tommy Atkins. 6 feet high. Vivid flame red; large size..... 60c each; \$6.00 per doz.
Venus. A pleasing shade of creamy white with a charming suffusion of lavender. Large and well-formed flowers of great appeal..... 35c each; \$3.50 per doz.



GLADIOLUS

WITH its great diversity of color and splendid spikes of bloom which can be had from July until frost, the Gladiolus is pre-eminently the people's flower. Bulbs can be planted from the middle of April to July and should be set about 3 to 4 inches deep and 8 to 10 inches apart, according to the effect to be produced. Can be planted in succession for different blooming periods.

If wanted by mail, add 5c per doz. for postage. Single bulbs mailed without additional charge.

Gladioli in quantity by Parcel Post. If to be sent by this means, estimate postage at rate of 8 lbs. per 100 bulbs.

Alice Tiplady. Large flower; beautiful orange-saffron color; choice.

6c each; 50c per doz.; \$3.50 per 100.

America. One of the finest varieties for cutting or bedding; color a beautiful soft flesh-pink; orchid-like in its coloring and texture; growth and habit perfect. 6c each; 45c per doz.; \$3.00 per 100.

Anna Eberius. Rhodamine purple with pansy purple blotch in throat.

7c each; 75c per doz.; \$4.50 per 100.

Dr. F. E. Bennett. Peach red, overlaid with flame scarlet, throat speckled ruby and creamy white.

10c each; \$1.00 per doz.; \$8.00 per 100.

Dr. Van Fleet. Delicate rose with deeper edges.

10c each; \$1.00 per doz.; \$7.00 per 100.

Crimson Glow. Glowing crimson-scarlet, massive spikes and flowers of large size.

7c each; 75c per doz.; \$4.50 per 100.

E. J. Shaylor. Splendid deep rose pink; one of Kunderd's best ruffled varieties; good cut-flower.

7c each; 70c per doz.; \$4.00 per 100.

Miss Helen Franklin. White with purple throat blotched; ruffled.

6c each; 60c per doz.; \$4.00 per 100.

Golden Measure. Pure golden yellow; very large flowers of good substance; robust grower and considered the best yellow on the market; a superglad.

10c each; \$1.00 per doz.; \$7.00 per 100.

Giant Nymph. Light rose pink, with creamy yellow throat; very large, wide open flowers, well arranged on long stems; grows 6 feet tall.

10c each; \$1.00 per doz.; \$6.50 per 100.

Governor Hanley. Rich red with deeper throat, one of the earliest reds and good, tall cutflower.

10c each; 90c per doz.; \$5.50 per 100.

Halley. Large, well expanded flowers of salmon pink, lower segments blotched yellow with carmine markings.

6c each; 55c per doz.; \$3.75 per 100.

Jack London. Light salmon, orange flame stripes; perfectly placed flowers on strong stems.

7c each; 75c per doz.; \$4.50 per 100.

Jewell. Light salmon pink with beautiful golden yellow throat; flowers large and wide open on long slender stems; a most attractive variety; early.

7c each; 60c per doz.; \$4.00 per 100.

Le Marechal Foch. Salmon pink, flaked and striped deeper at edge of petals, large flowers and beautifully ruffled. 6c each; 55c per doz.; \$3.75 per 100.

Lily White. Pure white. Large flowers. Early.

7c each; 55c per doz.; \$3.75 per 100.

Los Angeles. Beautiful pink with flame feather in throat.

10c each; 90c per doz.; \$5.50 per 100.

Louise. Exquisite shade of bright lavender, growing brighter towards center.

7c each; 60c per doz.; \$4.00 per 100.

Leon Douglass. Enormous begonia pink. Four spikes equal a dozen any ordinary variety.

12c each; \$1.25 per doz.; \$7.00 per 100.

Maiden's Blush. An exquisite pink with lighter throat. Very dainty flower on graceful spike.

6c each; 50c per doz.; \$3.50 per 100.

Mrs. Dr. Norton. Silvery white base tinged with pink, deepening towards the edges of the petals, creamy blotches in throat on lower petals; tall, vigorous grower, splendid cut-flower.

7c each; 75c per doz.; \$4.50 per 100.

Mrs. Francis King. A magnificent new variety. The large blooms are of a delightful light scarlet and are well placed on the large spikes, bearing six open flowers at one time. . . . 6c each; 50c per doz.; \$3.50 per 100.



Mrs. Frank Pendleton. Color a lovely salmon-pink, with brilliant deep red blotches in the throat.

7c each; 70c per doz.; \$4.00 per 100.

Panama. A new seedling of America which resembles the parent variety in every way except that it is a much deeper pink. A grand variety. Spike very long with flowers large and well arranged.

6c each; 55c per doz.; \$3.75 per 100.

Peace. Tall, graceful spikes of large, pure white flowers with a touch of carmine in the lower petals.

6c each; 55c per doz.; \$3.75 per 100.

Mrs. F. C. Peters. A beautiful shade of rose lavender with a crimson blotch in throat.

10c each; 90c per doz.; \$5.50 per 100.

Purity. A pure white seedling of America, having the same habit of growth, form of flower and substance. A strong grower and free bloomer with tall, well-furnished spikes. 6c each; 55c per doz.; \$3.75 per 100.

Schwaben. Light yellow with red stripes on lower petals.

7c each; 60c per doz.; \$4.00 per 100.

Souvenir. Purest golden yellow of all Gladioli.

7c each; 60c per doz.; \$4.00 per 100.

McCullough's Superb Mixed. This superb mixture is composed exclusively of high-grade varieties, including many new and rare kinds. It embraces the greatest possible range of color, and contains the best large-flowering sorts. . . 6c each; 50c per doz.; \$3.50 per 100.

Extra Fine Mixed. This mixture contains a very complete range of splendid varieties, and while not as fine as the preceding the size and coloring of many of the sorts will be found out of the ordinary.

5c each; 35c per doz.; \$2.50 per 100.

OXALIS (Summer-Flowering)

VALUABLE for edging walks, flower beds, etc. Bulbs planted three inches apart form rounded rows of delicate foliage, about one foot high, and produce flowers in endless succession.

Dieppi Alba. Pure white, very fine.

Lasandria. Fine rose-pink, beautiful cut foliage.

Shamrock. Clover-like foliage, pink blossoms.

Each variety. 15c per doz.; \$1.00 per 100.

LILIES

NO CLASS of plants capable of being cultivated out of doors possesses so many charms. Rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance, they stand out prominently from all other hardy plants, and no herbaceous border, however select, should be without a few of its best sorts. With a well selected collection, *Liliums* may be had in bloom from June till October.

Culture.—They should be planted in good, rich, loamy soil, abundantly mixed with very rotten cow manure. Plant about four inches deep, and during the winter it is advisable to cover the surface of the bed with a thin layer of manure, which will not only afford a slight protection to the bulbs, but will materially enrich the soil. In spring the manure may either be removed or dug in between the rows.

Pot Culture.—The best soil to use is a rich loam, with the addition of one-third well-rotted manure. Select a large sized pot, say eight or ten inches, so as to allow of deep planting—a most essential matter where there are upper roots to protect. Dust a little charcoal about the bulb to keep it fresh, and cover at least two inches with soil.

After potting, one of the most important things to observe is the proper placing of the pots containing the bulbs. Like all other bulbs, to get the best results in flowering, the pots must be filled with roots before the top starts to grow; and to do this, they must be placed in some cool place and excluded from the light, until, on examination, the roots are found to be formed around the ball of earth.

Prices on single bulbs are postpaid. By the dozen or hundred, they will be forwarded at expense of purchaser.

AURATUM. (Golden-banded Lily.) Undoubtedly one of the finest. Its large, graceful, fragrant flowers are composed of six petals of a delicate Ivory-white color, thickly studded with chocolate crimson spots, and striped through the center with a golden yellow band; 3 to 5 feet.

Large Bulbs, 8 to 9 inches, 30c each; \$3.00 per dozen; \$20.00 per 100.

Extra Large Bulbs, 9 to 11 inches, 40c each; \$4.00 per doz.; \$30.00 per 100.



Lilium Auratum

REGAL. (The Regal Lily.) This is acknowledged to be the finest Lily in cultivation. It is absolutely hardy and is excellent for forcing under glass. The white flowers are long, trumpet-shaped, slightly suffused with pink, with a beautiful shade of canary yellow at the center, extending part way up the trumpet. It is delightfully perfumed, but without the heavy, oppressive odor of most Lilies.

Large Bulbs... 30c each; \$4.00 per doz.; \$25.00 per 100.
Mammoth Bulbs, 50c each; \$5.00 per doz.; \$45.00 per 100

SPECIOSUM. "Japan Lily." The varieties of this class are magnificent border plants, and also excellent for pot culture. All are perfectly hardy, and are among the most satisfactory Lilies to grow.

SPECIOSUM, ALBUM. Pure white, very fragrant.

Large Bulbs, 8 to 9 inches.
60c each; \$5.50 per doz.; \$40.00 per 100.

SPECIOSUM, RUBRUM or ROSEUM. White, suffused and spotted with crimson.

Large Bulbs 8 to 9 inches.
30c each; \$3.00 per doz.; \$20.00 per 100.

Extra Large Bulbs, 9 to 11 inches.
40c each; \$4.00 per doz.; \$30.00 per 100.

TIGRINUM. "Tiger Lily." Orange-salmon, spotted with black.
25c each; \$2.50 per doz.; \$17.50 per 100.

LILY OF THE VALLEY

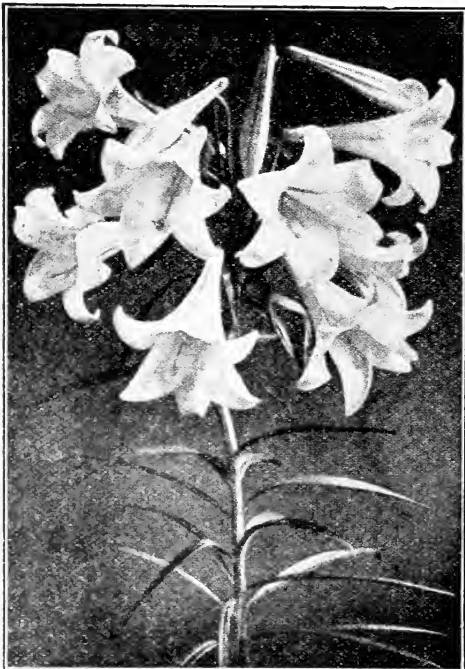
This popular and fragrant flower should receive more attention than is usually given. Like most other plants it well repays for being well treated, and if given a liberal top-dressing of well-rotted stable or sheep manure in fall or early spring, it will show the effect by increased size and vigor of the flowers. We offer strong clumps suitable for out door planting.

35c each; \$3.50 per dozen

TUBEROSES

ONE of the most fragrant and beautiful of the summer-flowering bulbs. For flowering in the open border, plant about the first of May.

Excelsior Pearl. Mammoth bulbs. Robust stem and long spikes of flowers, which are more double and twice as large as those of the old sort 7c each; 70c doz; \$4.75 per 100.



Lilium Longiflorum Giganteum

If you contemplate making a Lily bed, kindly give us dimensions of same, and we will be pleased to submit you an estimate, stating suitable varieties and lowest cost.

McCULLOUGH'S HIGH GRADE FERTILIZERS AND PLANT FOODS

All Fertilizers Delivered in Greater Cincinnati. Prices Subject to Change Without Notice.

A D C O

ARTIFICIAL STABLE MANURE Make It Yourself—In Your Own Garden

THE process consists of making a heap of all garden trash as it is collected, wetting it thoroughly, and adding to it a bacterial food—known as ADCO. In the course of three or four months the heap is converted by the action of the growing bacteria into a pile of excellent manure.

The recipe or formula is two pounds of ADCO with each wheelbarrow load of garden waste. Fifty pounds of ADCO make a ton of well-rotted manure.

To each ton of straw, hay, cornstalks or dried leaves, add 150 lbs. of ADCO to make four tons of fresh or three tons of rotted manure.

Each shipment is accompanied by simple directions which make any mistake impossible.

ADCO, in 25-lb. bags, each.....\$2.00

(Enough for 12 wheelbarrow loads of garden waste, making one-half ton of manure.)

ADCO, in special 150-lb. bags, each.....\$10.50

(Enough for a heap 10 ft. x 10 ft. x 6 ft., making about three tons of manure.)

AMMONIA SULPHATE

A concentrated nitrogenous fertilizer, containing ammonia in a quickly available form, desirable as a top dressing for plants in which a large leaf development or rapid growth is desirable. Free of weed seeds, odorless, entirely soluble. Write for pamphlets describing its use in the orchard, on farm crops, for the lawn or golf course.

1 lb. 10c; 5 lbs. 40c; 10 lbs. 70c; 25 lbs. \$1.20; 50 lbs. \$2.25; 100 lbs. \$4.00.

AGRICULTURAL LIMESTONE

THIS lime is especially prepared for use on soil, is useful for correcting acid soils, also for binding sandy soils and loosening clay soils. Should be applied at the rate of 1,000 to 2,000 lbs. per acre for sandy soils and 2,000 to 3,000 lbs. per acre for clay soils, a few weeks before applying Commercial Fertilizers.

Per bag of 80 lbs., \$1.00; 5 bags, \$4.50; 10 bags, \$7.75.

ACID PHOSPHATE 16%

SOME soils contain a large percentage of Nitrogen and some Potash, but still are deficient in Phosphoric Acid.

This must be supplied for the purpose of producing a balanced combination of fertilizer elements, by the application of 16% Acid Phosphate which produces a beneficial effect by supplying the proper proportion of Phosphoric Acid. Apply from 200 to 400 lbs. per acre. Analysis: Available phos. acid 16%; insoluble, 1%.

5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; per bag of 125 lbs., \$2.75.

PURE BONE MEAL

THIS pulverized ground bone is excellent for rose culture and lawns. It decomposes rapidly and is quickly effective. Should be applied at the rate of 500 to 600 lbs. per acre. Analysis: Ammonia 2%; total phos. acid, 27%.

1 lb., 10c; 5 lbs., 35c; 10 lbs., 65c; 25 lbs., \$1.25; 50 lbs., \$2.00; per bag of 125 lbs., \$4.00.

MURIATE OF POTASH

APPLY 100 to 150 lbs. per acre, usually with other fertilizers. This must be used with great care as it is very powerful. Excellent for Potatoes, Corn, Grain, etc. 1 lb., 10c; 5 lbs., 40c; 10 lbs., 70c; 25 lbs., \$1.20; 50 lbs., \$2.25; 100 lbs., \$4.00.

CATTLE MANURE—Shredded

A SUBSTITUTE for stable manure in gardens and greenhouses, as it supplies plant food, humus and organic matter; largely used for rose culture and for mulching. The quality we offer is selected manure taken from payed Stock Yards cattle pens—dried and sterilized by a high temperature direct heat process which kills weed seeds, fungus and disease germs. 100 lb. bags only. Per bag of 100 lbs., \$2.75.

COTTON SEED MEAL

RICH in Ammonia and Potash. An excellent fertilizer for Lawns and Golf Greens. Apply 15 lbs. to 1000 square feet. Per bag of 100 lbs., \$3.50.

DRIED BLOOD MEAL

THIS is a splendid fertilizer for Roses, Carnations, Chrysanthemums, etc., as well as for pot plants. Can be mixed with the soil or applied in liquid form.

1 lb., 15c; 25 lbs., \$2.00; 50 lbs., \$3.25; 100 lbs., \$6.50.

PREPARED HUMUS

THIS article is prepared from deposits of decayed vegetable matter. It has been successfully used for years and has proven to be worthy of extensive use. It is desirable for greenhouse and flower garden work, also for lawns and vegetables.

For pot plants, mix about one-third humus with two-thirds regular potting soil.

For lawns and greenhouse benches, it is applied as a top dressing from one-half to one inch in depth, which should be then worked in.

For flower and vegetable garden, apply at the rate of one-half to two inches deep and fork in well in the soil, or apply it in trenches the same as you would well rotted manure.

The prepared Humus is dry, thoroughly pulverized, odorless and clean to handle and apply and absolutely free from weed growth.

The following quantities are required to effectively cover an acre. If applied $\frac{1}{2}$ -inch in thickness, thirty tons per acre; if 1-inch thick, sixty tons per acre, and for general lawn work as a top dressing, one hundred pounds will effectively treat about 800 square feet, or three tons per acre.

5 lbs., 25c; 10 lbs., 40c; 25 lbs., 75c; 50 lbs., \$1.25; 100 lbs., \$1.75; 500 lbs., \$8.00; 1,000 lbs., \$15.00; 2,000 lbs., \$28.00.

HYDRATED LIME

GLENCOE Hydrated Lime is especially prepared for Lawn and Garden use, and put up in small bags for your convenience. It is the purest form of Lime reduced to a fine dry powder like flour.

It is only necessary to scatter it over the ground in early spring or in fall or winter. Use about two to four pounds per hundred square feet of surface.

We have an interesting booklet.

10 lb. bags 35c; 50 lb. bags \$1.00; 500 lbs. \$9.00.

NITRATE OF SODA

AS a top dressing use at the rate of 100 lbs., per acre between the rows when the plants are well established, on the following vegetables: Cabbage, Cauliflower, Egg Plant, Lettuce, Spinach, Beets, Celery and Onions. For Asparagus, a top dressing of 250 lbs. per acre when the young shoots are starting in the spring. For Strawberries, apply between the rows at the rate of 100 lbs. per acre at the time of blossoming. For the home garden, apply a solution of one ounce to two gallons of water.

1 lb., 10c; 5 lbs., 40c; 10 lbs., 75c; 25 lbs., \$1.20; 50 lbs., \$2.25; 100 lbs., \$4.00.

FERTILIZERS AND PLANT FOODS—Continued



VIGORO

Specially Prepared
Plant Food

Better Lawns—Better Vegetables—Better Flowers



YOU can have better lawns, flowers, and vegetables, if you use hardy, disease-free seed and the right plantfood. Plants, like human beings, must receive the right nourishment. VIGORO provides an economical, practical, and effective way to secure finest results. Economical because the cost is only 10c to 20c for every 100 square feet. Practical because it is clean, odorless, easy to apply—can be sown by hand like grass seed or applied with an ordinary kitchen colander. Effective because it contains all of the elements of plantfood required to produce early, vigorous growth and bring fruit, flowers, and foliage to full development. Complete directions in every bag.

A Swift & Company Product—For Lawns, Gardens, Flowers, Shrubby and Trees.

100-lb. bag, \$5.00; 50-lb. bag, \$3.00; 25-lb. bag, \$1.75; 5-lb. pkg., 50c; 12 oz. pkg., 10c.

BONRO

COMPLETE PLANT FOOD

For Professional Use where there is evidence
of Nitrogen Deficiency.

An Excellent Food for Bent Grass.

A Swift & Company Product.

ANALYSIS:			
Nitrogen	-	-	12%
Available Phosphoric Acid	-	-	6%
Potash	-	-	4%

Packed in paper lined cotton bags of 100 lbs., each....\$6.00

IMPORTED GRANULATED PEAT MOSS

G. P. M. BRAND

Granulated Peat Moss or Mull is especially selected for horticultural purposes. It is finely granulated, of little weight, and is entirely free from foreign matter. It is packed in compressed bales, burlaped on all sides, staked and wire strapped. When loosened the contents will cover 240 sq. ft. 1 inch deep. It is not sold by weight, because the weight of the bale is dependent on its moisture content, which varies according to atmospheric conditions.

A few of the many purposes for which it is used: Fertilizer Carrier, Mulching, Cold Frames, Lawns, Improving Soils, Propagating, Cuttings, Landscape Work, Benches (Green-house), Golf Courses, Packing, Storing Bulbs, Potting, Layering, Seed Beds, etc. Send for booklet giving detailed information.

Prices: Small bale, \$1.50; large bale (13 cu. ft. and covers 240 sq. ft. one inch deep) \$4.00; 5 bales, \$3.75 per bale; 10 bales, \$3.50 per bale.

FULTON'S Plantabbs

ODORLESS PLANT FOOD TABLETS

Plantabbs are small, white, odorless tablets more effective than the finest fertilizer. Ideal for house plants where smelly fertilizer cannot be used but equally good for all garden planting, particularly roses.

We highly recommend Plantabbs because they are economical, there is no waste, no run-off, no weeds, they are clean, odorless, easy to apply, give uniform feeding and by dissolving quickly produce immediate fertilization. Four sizes: 30 tablets, 25c; 75 tablets, 50c; 200 tablets, \$1.00; 1000 tablets, \$3.50.

PLANT STIMULANT TABLET

MAKES A WONDER GARDEN

USE it and you will have the largest crops of fruit and vegetables, and an abundance of the largest and sweetest-scented flowers of intense and vivid colors.

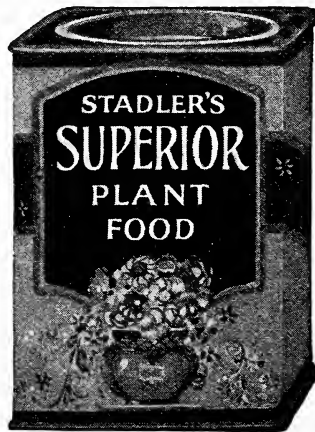
Here is the secret. Science has produced a tablet that is rich in plant food, containing 11 per cent Nitrogen, 12 per cent Phosphoric Acid and 15 per cent Potash, and it is odorless and clean. Compare this analysis with that of any other fertilizer.

Simply insert tablets in the soil near plants. Or, four tablets dissolved in a gallon of water is the solution used instead of liquid manure and is less trouble and gives better results than the objectionable manure water. Make liquid applications to the soil—not on foliage or stems.

Complete directions with every package.

Price, postpaid; trial size (10 tablets) 15c; 30 tablets, 25c; 100 tablets, 75c; 1,000 tablets, \$3.50.

STADLER'S "SUPERIOR" PLANT FOOD



FOR Potted House Plants, Garden, Shrubs, Lawn and Trees, contains all the essential elements of plant life. For both indoor and outdoor plants, it is universal in its year-round use.

Put a tablespoonful of Superior Plant Food in the watering pot every time you sprinkle your garden, or a teaspoonful in the pitcher when you water your house plants—and then watch results! You will be amazed at the new glow of health and rich beauty your plants will show almost at once.

7 oz. can (making 27 ½ gallons).....\$.50
16 oz. can (making 65 gallons).....1.00
A 1/2 can contains 600 treatments.

SHEEP MANURE—Pulverized

THIS is a natural manure; excellent for mixing with the soil. Strewn over and dug into the vegetable garden or placed directly in drills or hills, it promotes a rapid, steady growth. Especially valuable for lawns, contains all the constituents for promoting a quick, luxuriant growth and a rich green color. Use at the rate of from 500 to 600 pounds per acre. For pot plants, mix one part of sheep manure to six parts of soil. For use in the vegetable garden spread over the surface and dig in. Being soluble, it readily makes a safe liquid manure—one pound to five gallons of water can be used. 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.65; 100 lbs., \$2.75.

SPRAY CALENDAR

	Spray No. 1	Spray No. 2	Spray No. 3	Spray No. 4	Spray No. 5
APPLES	Dormant for scale and red mite, to be applied in early spring when temp. is well above freezing. Use oil emulsion or Scabicide. Delayed dormant for scale, aphids and scab is applied when $\frac{1}{4}$ – $\frac{1}{2}$ inch of green shows. Use lime-sulphur and add nicotine sulphate if aphids are present.	(Pre-blossom). For scab, frogeye curculio, bud-moth and other chewing insects. Apply when cluster buds separate or as advised by Spray Service. Spray with liquid lime-sulphur or dust with dusting sulphur. Add arsenate of lead if chewing insects are present, nicotine if aphids are present.	(Petal-fall). For apple scab, codling moth and curculio. Apply when most of the petals have fallen, before the calyx closes. Spray with liquid or dry lime-sulphur and arsenate of lead or dust with sulphur and arsenate of lead.	(2–3 weeks spray). For scab, blotch, Brook's spot and codling moth. Apply 2–3 weeks after petal-fall or as advised by Spray Service. Use same materials as for No. 4. A spray 10 weeks after petal-fall or as advised by the Spray Service is necessary for the second brood of codling moths. Use same materials as for spray No. 4.	For blotch, Brook's spot and codling moth. Apply 6 weeks after petal-fall or as advised by Spray Service. Use same materials as for No. 4. A spray 10 weeks after petal-fall or as advised by the Spray Service is necessary for the second brood of codling moths. Use same materials as for spray No. 4.
PEAR AND QUINCE	If scale and red mite are present apply oil in the dormant.	(Pre-blossom). For scab. Apply when cluster buds separate, using liquid or dry lime-sulphur.	(Petal-fall). For scab, sooty fungus, leaf-spot and codling moth. Use Bordeaux 1–3–50. Lime-sulphur often causes spray injury in hot weather.	(9–10 weeks spray). For scab, sooty fungus, codling moth and psylla. Use Bordeaux and arsenate of lead.	
PEACH	For leaf curl and scale. Apply in late fall or early spring. Temp. to be above 50°. Use Bordeaux or lime-sulphur, or, if red mite is present use 4–4–50 Bordeaux and oil.	(Shuck-split). For brown rot, scab and curculio. Apply when husks have fallen. Use dry-mix, Ditreonic or Mulsoil sulphur and arsenate of lead, or dust with sulphur.	For brown rot, scab and curculio. Apply 2–3 weeks after husk-fall. Use same materials as for No. 2, but omit lead if curculio is not present.	For brown rot. Apply 2–3 weeks before fruit begins to ripen. Use same materials as for No. 2, but omit the lead.	
PLUM AND CHERRY	Use oil emulsion or Scabicide if scale is present, otherwise dormant spray is unnecessary.	(Petal-fall). For leaf-spot and curculio. Apply when most of the petals have fallen. Use lime-sulphur.	(Shuck-split). For leaf-spot, brown rot and curculio. Apply when husks have fallen. Use lime-sulphur and arsenate of lead.	For brown rot. Apply 2–3 weeks before fruit begins to ripen. Use lime-sulphur, but no leaf-spot.	Cherries should receive one or two sprays of lime-sulphur after the fruit is picked to control leaf-spot.
GRAPES	For dead arm, mildew and rot. Apply when new shoots are 8–10 inches long. Use Bordeaux 4–6–50.	(Pre-blossom). For rot, mildew, rose chafer, berry moth. Apply just before blossoms open. Use Bordeaux 2–4–50 and arsenate of lead.	(Petal-fall). For rot, mildew, berry moth and leafhoppers. Apply 3–5 days after petal-fall. Use Bordeaux, lead and nicotine sulphate.	(2 weeks spray). For rot, berry moth and leaf hopper. Apply two weeks after petals have fallen. Use same materials as for No. 3.	Apply same material as for No. 4 just before berries touch in clusters. In wet seasons keep fruit covered with Bordeaux to control rot.
CURRENTS AND GOOSEBERRIES	If scale is present apply lime-sulphur or oil in the dormant.	For leaf-spot and anthracnose apply Bordeaux or lime-sulphur as the leaves begin to open.	For leaf-spot, mildew and currant worms apply Bordeaux or lime-sulphur and arsenate of lead after fruit is set.	When currant worms appear use same material as for No. 3, or if fruit is ripening use hel-lebor.	After fruit is picked apply Bordeaux or lime-sulphur for leaf-spot and anthracnose.
RASPBERRY AND BLACKBERRY	Black raspberries should have a delayed dormant spray of lime-sulphur to control anthracnose.	No other sprays are recommended on bramble fruits.			

Directions for use of the Materials Recommended will be Found on Each Package.

INSECTICIDES AND FUNGICIDES

Liquid Insecticides and Poisons cannot be sent by mail.

Antrol

FOR sweet eating ants—the kind that infest the house and are frequently seen on plants and trees. This is a complete system adapted to any size house, composed of small glass containers and special Antrol syrup. The containers are partially filled with syrup and then placed about the outside edges of the house. Ants smell the mildly poisonous syrup, eat it and then transmit it to their queen. Soon the entire ant nest is destroyed!

Antrol sets containing 4 containers and 1 4-oz. bottle of syrup, 95c; Antrol extra containers (each), 15c; Antrol syrup, 4-oz. bottle, 45c; Antrol syrup, pints, 95c; Antrol syrup, gallons, \$3.75.

Note—Enough containers and syrup should be purchased to place one container every 15 feet around the house or along ant "trails" in the garden.



★Arsenate of Lead

(Dry Powdered)

FOR Potatoes use 2 to 3 pounds to 50 gallons of water, applying 50 gallons or more per acre. For all other purposes use 1 to 1½ pounds to 50 gallons of water, or one teaspoonful to 1 gallon of water. It is best to reduce to a thin paste by mixing with a small amount of water, before putting into spray tank. On tender foliaged Trees

and Plants add about two pounds of lime to each 50 gallons spray liquid. ½-lb. pkg., 25c; 1 lb. pkg., 40c; 4 lb. pkg., \$1.10.

★"Black Leaf 40"

FOR Aphids indoors use ¼ pint "BLACK LEAF 40" to 100 gallons of water or 1 teaspoonful to 1 gallon of water, with sufficient soap in water to make a good suds. For outside use apply solution double strength. Several formulas for destroying other sucking insects on each package. This is also a contact remedy. 1 oz. bottle, 35c; ½-lb. bottle, \$1.25; 1-lb. bottle, \$2.50; 2-lb. tin, \$3.75; 5-lb. tin, \$7.00; 10-lb. tin, \$11.85.



★Bordo Lead Powder

COMBINED Insecticide and Fungicide. Kills bugs and prevents Blight, Rot, Mildew and Fungus, in one spraying operation. Can be used for wet spraying or dry dusting. Can be used for Fruits, Vegetables or Flowers. 1 lb. makes about 7 gallons—ready to apply. ½ lb., 30c; 1 lb., 50c; 4 lbs., \$1.25.



★Bordo Mixture (Dry Powder)

MANUFACTURED by a new process and will not dry out or deteriorate. Quantity to be used not over one-third the amount used in Bordo Paste Mixture. Mix with the required amount, enough water to make a thin paste before putting into the spray tank.

Do not use on Peach, Japanese Plum or other tender foliaged plants, unless diluted to one-half strength. ½-lb. pkg., 25c; 1-lb. pkg., 40c; 4-lb. pkg., \$1.10.



Crow-Tox

Bird and Rodent Repellent. Saves Seed Loss and Replanting. Large size can \$1.50 Small size can 1.00

★Calcium Arsenate

(Dry Powdered)

IN all garden operations this remedy offers protection against the Bean Beetle, Potato Beetle, Cabbage and Tobacco Worms and other leaf-eating insects. Can also be used effectively in combination with Sulfocide. Use 1 part of Calcium Arsenate to 9 parts of Hydrated lime for Bean Beetle. 1 lb., 35c; 4 lbs., \$1.25; 12 lbs., \$2.75.

Copper Sulphate

(Blue Stone)

1-lb., 20c; 10 lbs., \$1.50; 25 lbs., \$3.00; 50-lbs. \$5.50.

★Cyanogas (For Greenhouse Fumigation)

ALL fumigation should be started by using one-quarter ounce of Calcium Cyanide for each 1,000 cubic feet of space, the correct dosage for a tight house. This dosage should kill 100 per cent of aphids ("black fly," "green fly," etc.) such as rose aphids and chrysanthemum aphids; 100 per cent of the adult and larvae of the white fly; all exposed thrips, and the younger stages of the soft scale.

If it is inconvenient to weigh out the Calcium Cyanide it may be measured with sufficient accuracy on the basis of one-half ounce for the average level tablespoonful.

Fumigating Greenhouses with Calcium Cyanide, will effect a saving to most growers of more than 75 per cent over the cost of present methods of fumigation.

Cyanogas Calcium Cyanide is also effective for the control of Ants, Moles and Rats. Write for booklet. Per lb., 75c; 5 lbs., \$3.00; 25 lbs., \$10.00.



Ever Green Non-Poisonous Insecticide is recommended especially for killing the following insects: Ants, Cut-worms, Cabbage Worms, Green Flies, White Flies, Thrips, Leaf Hoppers, Currant Worms, Aphids (Plant Lice), Rose Chafer, Rose Slugs, Pear Slugs, Mealy

Bugs, Mites, Red Spiders, Japanese Beetles, Leaf Tiers, Potato Beetles, Squash Beetles (Stink Bugs), Aster Beetles, Bean Beetles, Cucumber Beetles.

Ever Green diluted 1 to 100 and sprayed around plants during the early growing period will effectively protect them from cut-worms. 1 oz., bottle, 35c; 6 oz. bottle, \$1.00; 16 oz. bottle, \$2.00; 32 oz. bottle, \$3.50; by parcel post—1 oz. bottle, 50c; 6 oz. bottle, \$1.15; 16 oz. bottle, \$2.35; 32 oz. bottle, \$4.25.

Fish Oil Soap

FOR destroying scale insects on Plants, Trees, Vines, etc., for washing down the bark of Trees, Grape Vines, etc. Dissolve one pound in one gallon of hot water, then add 9 to 10 gallons of cold water; for trunks and branches of trees use a thicker solution and apply with a brush. This is also a contact remedy. 1 lb., 35c; 5 lbs., \$1.50; 25 lbs. in bulk, \$5.00.

By Parcel Post—1 lb., 45c; 5 lbs., \$1.75.

Grape Dust

NON-POISONOUS powder, usually effectual for the remedy and control of most powdery mildews on Grapes, Gooseberries, Roses, etc. Apply with powder bellows and dust evenly over plants. 1 lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.90.

By Parcel Post—1 lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.25.

★Lime-Sulphur Solution

FOR fall, winter and early spring spray. Destroys San Jose Scale, Peach Leaf Curl, Bud Moth, Apple Aphids, Blister Mite, any Scale Insects or Bark Lice. 1 gallon will make 8 gallons spraying liquid. 1 qt., 50c; ½ gal., 75c; 1 gal., \$1.00; 5 gals., \$4.00; ½ bbl. (30 gals.), \$8.00; 1 bbl. (50 gals.), \$12.00.

Dry Lime-Sulphur

From 10 to 12 pounds of Dry Powdered Lime-Sulphur should be used with 50 gallons of water, for a dormant spray.

From 2 to 3 pounds to 50 gallons of water in combination with 1½ pounds of Dry Powdered Arsenate of Lead should be used for summer spraying on all seed fruits such as Apples, Pears and Quinces, and half this strength on all stone fruits. 1 lb., can, 35c; 5 lb. can, \$1.50; 10 lb. can, \$2.75; 25 lb. can, \$5.00.

Contact Remedies to be Effective Must Reach the Insects. Insecticides prefixed by star (*) cannot be mailed.

INSECTICIDES AND FUNGICIDES—Continued

Aphistrogen For Aphis (Plant Lice)

A non-poisonous highly concentrated contact spray for Aphis on Roses and other ornamental plants. Remarkably quick acting without discoloration or harm to foliage or blooms. Complete with spreader. Only water required in mixing. Economical—refreshes and invigorates the foliage. Pleasant to use. 2 oz., 50c; ½ lb., \$1.25; 2 lbs., \$3.50; 4 lbs., \$6.50; 12 lbs., \$15.00.

Ferogen

Spring and Summer Ground Dressing and Stabilizer
An especially high grade food for Roses in a form adapted to their requirements. Combined with certain chemicals usually lacking in soils to make sturdy plants and fine blooms. Not to be confused with ordinary common fertilizers. Used in spring and summer.

Where prize blooms are desired, this product is recommended. 1 lb., 75c; 2 lbs., \$1.25; 5 lbs., \$2.75; 10 lbs., \$4.75; 25 lbs., \$11.00; 100 lb. keg, \$40.00.

NOTE:—A 10 pound tin is sufficient for one application for 30 to 50 rose bushes.

**Fungtrogen Conquers Mildew and Black Spot**

An effective preventive and remedy for mildew and black spot on roses. Does not stain foliage or blooms. Contains a remarkable plant stimulant that tones the plant each time sprayed. Equally valuable for fungous diseases on Phlox, Delphiniums, Hollyhocks, etc. Economical, easy and pleasant to use.

½ pt., 75c; pt., \$1.25; qt., \$2.00; ½ gal., \$3.50; gal., \$6.00.

Insectrogen Kills Leaf Eating Insects

Such as slug worms, caterpillars, Japanese beetles, etc. Insects eating the smallest particle of the leaf sprayed with it will be killed. Lasts on the foliage and keeps clean of eating insects for a long time. A companion spray which harmonizes with Fungtrogen. 4 oz., 60c; ½ pt., \$1.00; pt., \$1.75; qt., \$2.75; ½ gal., \$4.50; gal., \$8.00.

Terogen Soil Disinfectant and Fertilizer

A soil dressing that destroys the spores of Black Spot Fung and other fungous diseases that harbor in the ground and renew attacks the following year. Also kills larvae of most insects including rose pith borer, rose bugs, aphids and beetles. Makes sturdy and healthy plants and helps to prevent chlorosis—yellowing of foliage. Used late summer, fall or winter. 1 lb., 75c; 2 lbs., \$1.25; 5 lbs., \$2.75; 10 lbs., \$4.75; 25 lbs., \$11.00; 100 lb. keg, \$40.00.

NOTE:—A 10 pound tin is sufficient for one application for 30 to 50 rose bushes.

***Magnesium Arsenate Dust**

For Control of the Mexican Bean Beetle.

From the start of the Mexican Bean Beetle in 1920 the National as well as the State Entomologists have worked with different sprays for control with various results. For the last five seasons Magnesium Arsenate Dust has given the best results because it does not burn foliage.

1 lb., 35c; 4 lbs., \$1.00; 12 lbs., \$2.75.

Mexogen

Kills and Repels the Mexican Bean Beetle

Mexogen is a highly concentrated contact spray and repellent. It destroys the larvae and eggs, as well as the adult beetle. Also kills cabbage worms and many other insect pests, being especially desirable on account of its non-poisonous nature. One quart makes 11 gallons of spray. ½ pt., 75c; qt., \$2.00; gal., \$6.00.

Mexogen makes about 40 times its volume as a spray.

***Nico-Fume Liquid**

For destroying Aphis, Thrip and Red Spider. Contains 40 per cent nicotine.

Use one to two teaspoonfuls of Liquid to each gallon of water. This is a contact remedy.

¼ lb., 75c; 1 lb., \$2.00; 4 lbs., \$6.25; 8 lbs., \$11.50.

Nico-Fume Paper

24 sheets, \$1.25; 144 sheets, \$5.00; 288 sheets, \$8.75.

***Nico-Fume Tobacco Powder**

For Fumigating Greenhouses

For Florists and growers who prefer a high-strength, especially prepared, tobacco powder fumigant, to destroy Aphis, Thrips, etc., we hereby offer "Nico-Fume" Powder—which may confidently be relied upon as being worthy to bear the name of "Nico-Fume."

1 lb. tin, \$1.25; 5 lb. tin, \$3.75; 10 lb. tin, \$6.85.

Paradow

(Para-Dichlor-Benzene)

Kills the Peach Tree Borer

Full directions on each package. Must not be used on young trees. Ask for descriptive circular.

Prices: 1 lb., 50c; 5 lbs., \$2.25; 10 lbs., \$4.00.

By Parcel Post—1 lb., 70c; 5 lbs., \$2.75; 10 lbs., \$4.50.

***Pyrox**

Pyrox is a dependable all-around spray for use on vegetables and fruits. It combines a strong poison for controlling leaf-eating insects and a powerful fungicide for the control of plant diseases such as potato blight, rots, and rusts. It has filled the need for a reliable material for general purpose spraying for twenty-five years—it has stood the test of time and practical field experience.

Pyrox is packed in convenient sizes and is all ready for use by mixing with cold water. 1 lb. jar, 50c; 5 lb. drum, \$2.00; 10 lb. drum, \$3.50.

***Paris Green**

A POISONOUS Insecticide in powder form for insects that chew. Largely used on Potatoes and Tobacco. Can be used as a spray, or dry and applied with Dry Powder Dusters.

When used as a spray, dilute one pound Paris Green in 150 to 300 gallons of water. When used on Fruit Trees add two pounds lime. ¼-lb., 20c; ½-lb., 30c; 1 lb., 50c. 4 lbs., \$1.50.

***Pomo-Green**

Dusting with "leaf-green" Pomo-Green is the protective method used by experts! Pomo-Green is the celebrated Massey Dust made more toxic and colored green.

Roses—Black Spot, Mildew or Chewing Insects are bound to appear. Pomo-Green prevents and controls these insects and diseases quickly and effectively.

Flowering Plants—Pomo-Green is a specific for the control of Snappdragon Rust, Carnation Rust, Sweet Pea Mildew, Phlox Mildew, Lilac Mildew and many other fungous diseases of flowering plants and shrubs. Protect new growth by dusting with Pomo-Green once each week throughout the growing season. 1 lb. can., 50c; 5 lb. carton, \$2.00.

***Pomo-Dust**

Leaf Dust for Roses and other plants. 1 lb., 40c; 5 lbs., \$1.25; 10 lbs., \$2.00; 25 lbs., \$4.25; 50 lbs., \$7.50.

***Scalecide**

Controls Scale. If your trees are infested with scale give them a Scalecide spray in the fall. Scalecide does a thorough job by creeping under the protective scales and into cracks and crevices of the rough bark.

Scalecide also controls Pear Psylla, Leaf-Curl, Fire Blight, Case Bearer, Bud Moth and Makes Trees Vigorous and Productive, because it spreads into Cracks and Crevices.

The Oldest Commercial Dormant Spray. Scalecide has been in use since 1904. It antedates commercial lime-sulphur and all other commercial dormant sprays. Almost a quarter century of successful use is convincing evidence that Scalecide offers real value to the fruit grower.

1 qt., 70c; 1 gal., \$1.60; 5 gals., \$6.00; 10 gals., \$10.00; 15 gal., \$13.50; 30 gals., \$24.50; 1 barrel, (50 gals.), \$34.00.

Slug Shot

VERY effective in destroying Caterpillars, Currant, Gooseberry and Cabbage Worms, Mexican Bean Beetle, Potato, Melon, Squash and Cucumber Bugs, Rose Slugs, etc.

When used on Melon, Squash and Cucumber Vines should be put on lightly. 1 lb. carton, 25c; 5 lbs., 75c; 10 lbs., \$1.35.

Snarol

FOR snails, cutworms, slugs, grasshoppers, sow bugs, Earwigs and other garden pests. 1 lb. package, 45c; 3-lb. package 95c; 15-lb. bag \$3.50.



INSECTICIDES AND FUNGICIDES—(Continued)

ATLACIDE CALCIUM CHLORATE Kills Weeds

Recommended by Federal and State Agricultural Experiment Stations for killing noxious weeds

WHY ATLACIDE CALCIUM CHLORATE IS THE IDEAL WEED KILLER

1. It kills all kinds of objectionable weeds and grasses.
2. It is safe to use and eliminates the fire hazard encountered through the use of Sodium Chlorate.
3. It is non-poisonous to human beings or live stock and will not permanently injure the soil.
4. It immediately absorbs moisture from the air and plants. Therefore, the active principle, Chloric Acid, is rendered immediately and fully available as compared with the lower effectiveness of other non-deliquescent Chlorates.
5. It is especially compounded for weed killing purposes, containing activating ingredients which furthermore make chloric acid, the killing agent, more available and more active.
6. It is manufactured in powdered form, convenient to use and instantly soluble in water. It may be dusted directly on the vegetation or applied in spray solution.

7. It may be used in orchards of deep rooted trees without danger of injury to the trees, provided chemical does not come in contact with the leaves and branches.

8. It is packed in air tight steel drums weighing 200-pounds, 100-pounds or 50-pounds net, and in 3½ pound sifter top cans (12 in case). The sifter cans may be refilled from the drums.

9. If chemical is retained in the drums, it does not deteriorate and may be used during succeeding seasons.

PRICES:

3½ lb. cans at \$1.25 each; \$12.00 per dozen.
 50 lb. drums at 13½¢ per lb.
 100 lb. drums at 13¢ per lb.
 200 lb. drums at 12½¢ per lb.
 ½¢ per lb. less in ton lots.

SEED DISINFECTANTS

Control Seed-borne Diseases of Farm Crops

Stimulate Germination—Improve Stands

Generally Produce Increased Yields of Higher Quality



CERESAN

for seed treatment of small grains



Ceresan has proven effective in controlling such seed-borne diseases as bunt or stinking smut of wheat; stripe disease of barley; loose and covered smuts of barley and oats and covered kernel smut of sorghum. It is the only dust treatment which has successfully controlled these destructive grain diseases. Ceresan does not injure the seed nor the grain drill. Only 2 oz. of Ceresan required per bushel of wheat, rye or sorghum and 3 oz. for barley and oats. Easy to apply, economical to use. 8 oz., 50¢; 1 lb., 75¢; 5 lbs., \$3.00; 25 lbs., \$12.50; 100 lbs., \$49.00; 300 lbs., \$144.00.

SEMESAN BEL

for seed white and sweet potatoes



Simply mix, dip, drain, dry and your seed potatoes are ready for planting. Semesan Bel may be used on either whole or cut seed pieces. Semesan Bel effectively controls such seed-borne disease organisms as scab, rhizoctonia and black-leg. By controlling these diseases, germination is generally increased, stand improved and the resultant crop bigger and of better quality. One pound treats 16 to 20 bushels of seed. Du Bay Semesan succeeds the products sold as Du Pont Semesan Bel and Bayer Dipdust.

4 oz., 50¢; 1 lb., \$1.75; 5 lbs., \$8.00; 25 lbs., \$31.25; 100 lbs., \$120.00; 300 lbs., \$345.00.

SEMESAN JR.

for seed field and sweet corn



Semesan Jr. is especially effective in controlling seed-borne infections of diplodia, Gibberella and Basiporium, without harming the seed embryo in the least. Its use protects the seed from rotting in the ground and makes possible earlier planting which generally results in increased yields. Improved germination, better stands, control of certain diseases, increased yields are the benefits which thousands of farmers are reaping, at a cost of less than 3c. an acre. Succeeds the products sold as Du Pont Semesan Jr. and Bayer Dust. 4 oz., 50¢; 1 lb., \$1.75; 5 lbs., \$8.00; 25 lbs., \$31.25; 100 lbs., \$120.00; 300 lbs., \$345.00.

SEMESAN

for flower and vegetable seeds



Semesan may be applied in dust or liquid form to the seed before planting. It is harmless to the seed but deadly to disease organisms that may be on the seed. Semesan is such a powerful and effective disinfectant that seed treatment with it is ridiculously low in cost, ranging from ¼c. to 1c. per pound of seed. One ounce treats 15 lbs. of seed. Effective in controlling damping off and such devastating gladiolus diseases as hard rot and scab. Du Bay Semesan succeeds the products sold as Du Pont Semesan and Bayer Uspulun. 2 oz., 50¢; 1 lb., \$2.75; 5 lbs., \$13.00; 25 lbs., \$56.25; 100 lbs., \$220.00; 300 lbs., \$645.00.

NU-GREEN

for Brown Patch control



Nu-Green has been tested thoroughly on hundreds of the leading golf courses throughout America and has proved to be a most effective and practical treatment for preventing and controlling brown patch. It quickly kills the brown patch fungi and promptly restores the diseased grass to a healthy condition.

These soluble organic mercury compounds do not burn or injure the finest turf when properly applied

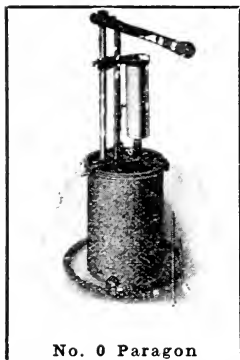
3 oz.	\$.50	25 lbs.	\$ 37.50
1 lb.	2.00	100 lbs.	145.00
5 lbs.	9.00	300 lbs.	420.00

Du Bay Seed Disinfectants, like many agricultural chemicals, are poisonous in nature and owing to present Postal Regulations cannot be sent through the mails but must be sent by express or freight.

Treat All Seeds Before Planting with Du Bay Disinfectants

SPRAYING PUMPS AND APPLIANCES

SPRAYING is of such importance that the Experiment Stations all over this country have given much of their attention to it, and their findings have been of incalculable value. Diseases and insects can no longer exist if the proper insecticide is applied through the medium of an up-to-date spray apparatus.



No. 0 Paragon

Paragon Sprayers

THESE Sprayers are strongly constructed and can be easily operated by one man. They can be brought in close proximity to the work, thereby eliminating the use of a long, expensive hose. Our patented, self-cleaning strainer prevents the necessity of first straining the liquid to be sprayed. The agitator also keeps the liquid thoroughly stirred.

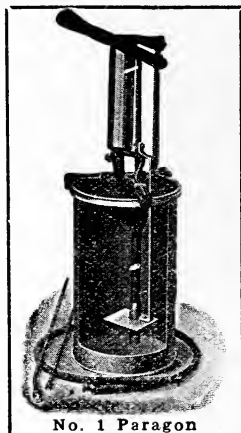
The spray nozzle has only $\frac{1}{4}$ inch outlet and spreads the liquid well, thereby covering a large surface with a small amount of liquid, making it a very economical sprayer.

All parts of the machine are made of the best material obtainable.

The reservoir is made of heavy galvanized iron. All essential fittings and valves are made of brass, making it strong and durable. The body of pump is cast iron, well ribbed to prevent breakage. The screen is of heavy perforated brass and will last many years. The pump frame can easily be removed from tank when it needs cleaning and by running water through machine after using, the entire machinery can be easily and thoroughly cleaned.

Suitable for spraying Insecticides and Fungicides on trees, shrubs and vines, as well as the application of Whitewash and Cold Water Paints.

Paragon Sprayers Do Not Clog.

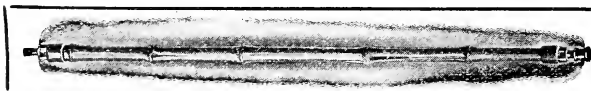


No. 1 Paragon

Price List of Paragon Sprayers

- | | |
|---|---|
| No. 0. Capacity, 3 $\frac{1}{2}$ gallons. Equipment, 4 feet spray hose, 3 feet spray pipe, 1 mist spray nozzle, 1 steel cap for mist nozzle, 1 straight spray. Price..... | No. 4. Machine without wheels. Price..... |
| \$12.50 | \$29.50 |
| No. 1. Capacity, 6 gallons. Equipment, 5 feet 6-ply hose, 5 feet spray pipe, two spray nozzles. Price..... | No. 5. Capacity, 50 gallons. Equipment, 25 feet 6-ply hose, 10 feet spray pipe, one 3-way spray nozzle, one single spray nozzle. This sprayer has solid cast brass pump and large air chamber. It is positively the very best hand power sprayer made for tree spraying. Price..... |
| \$17.50 | \$45.00 |
| No. 2. Same capacity and equipment as No. 1, but mounted on strong steel truck which can easily be wheeled to any desired place. Truck is easily detached when desired. Price..... | Nos. 1 and 3 Sprayers can be furnished with solid all cast brass pumps for—additional..... |
| \$22.50 | \$5.00 |
| No. 3. Capacity, 12 gallons. Equipment, 10 feet 6-ply hose, 7 $\frac{1}{2}$ feet spray pipe, two spray nozzles. Mounted on strong steel truck and can easily be wheeled to any desired place. Truck is easily detached when desired. Price..... | No. 4 Sprayer can be furnished with solid all cast brass pump for—additional..... |
| \$25.00 | \$6.00 |
| No. 3. Machine without truck. Price..... | Send for descriptive circular giving detailed information. |
| \$21.50 | |
| No. 4. Capacity, 28 gallons. Equipment, 20 feet 6-ply hose, 10 feet spray pipe, two spray nozzles. Mounted on two strong 30-inch wheels. Price..... | Paragon Sprinkling Cart. Capacity 50 gal., Sprinkler Arm, 6 ft. long..... |
| \$39.50 | \$42.50 |

COMPRESSED AIR SPRAYER. Galvanized Tank, \$6.75 Brass Tank, \$9.50



Bamboo Brass Lined Spray Poles

12-foot lengths. Net price.....\$5.00
10-foot lengths. Net price.....4.00

Auto Compressed Air Sprayer

CAN be suspended from the shoulder, allowing the free use of the arms. A few strokes of plunger in air chamber will compress enough air to discharge the entire contents. A practical machine for potatoes, tobacco, small fruits, vineyards, poultry houses, green houses, etc. Extension pipes for spraying trees.

Auto Spray. No. 9-B. Brass tank, capacity, 3 $\frac{1}{2}$ gallons, with Auto-Pop Nozzle..\$9.00

Auto Spray. No. 9-D. Galvanized tank, capacity, 3 $\frac{1}{2}$ gallons, with Auto-Pop Nozzle.....\$5.50

Brass Extension. Two foot lengths—60c; Elbow.....40c



MYER'S SPRAY PUMPS

Myer's Lever Bucket Brass Spray Pump. Complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle.....\$6.00

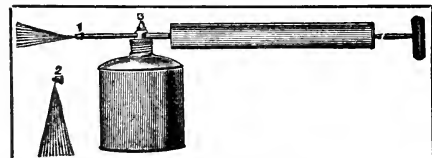
Myer's Defiance Brass Spray Pump. Complete with hose and graduating Vermorel fine, coarse spray and solid stream nozzle.....\$5.00

Myer's Little Giant Brass Spray Pump. Complete with hose and imperial combination, fine, coarse spray and solid stream nozzle.....\$4.00

Four-foot Pipe Extension.....\$.60

Bordeaux Nozzle.....1.00

Graduating Vermorel Nozzle......90



"JAKE" COMPRESSED AIR SPRAYER

THEY give a continuous spray. By means of the universal nozzle the spray can be thrown on the under side of the leaves of plants and shrubs, the underside of beds and other furniture, into corners, behind doors, on top of mouldings, window casings, behind steam pipes, and other difficult places. Capacity, one quart.

- | | |
|--|--------|
| Tin Pump with Tin Reservoir, each..... | \$.90 |
| Tin Pump with Galvanized Reservoir, each..... | 1.10 |
| Brass Pump with Brass Reservoir, each..... | 1.60 |
| No. 55. Junior Sprayer—Capacity 1 Pint..... | .65 |
| No. 75. Giant Sprayer—Capacity $\frac{1}{2}$ Gallon..... | 1.75 |

Good Sprayers Save Time and Expense.

SPRAY PUMPS AND HAND SPRAYERS—Continued



Hudson Perfection Compressed Air Sprayer

It is just the thing for general work around the house, in gardens and small farms. Used for potato spraying, white-washing, spraying disinfectants, cold water paints, etc.

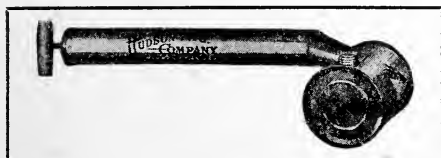
Tank. 7 1/2 inches diameter, 20 inches long, capacity, 4 gallons.

Made of first quality galvanized sheets or all brass as ordered.

No. 110G. Galvanized Steel Tank, Capacity, 4 gal., \$6.50

No. 110B. Brass Tank, Capacity, 4 gallons, \$9.00

Hudson Misty Sprayer



No. 452 Tin, each 35c

HUDSON WIZARD

No. F6. Tin, each 35c

HUDSON DAISY

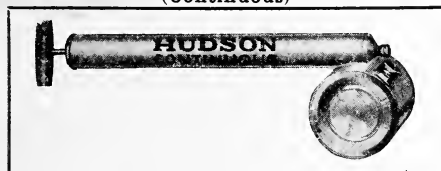
No. F4. Tin, each 25c

HUDSON CARDINAL

No. 435. Tin Pump, Galvanized Tank, \$1.50

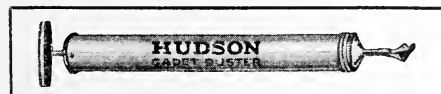
HUDSON TROMBONE SPRAYER, each \$4.35

Hudson Comet Sprayer (Continuous)



No. 426. Tin \$.80
No. 426. Brass 1.45
No. 432 Jr. Continuous Tin50
No. 430. Hudson Crescent. 1 qt. Glass Jar55

Hudson Cadet Duster

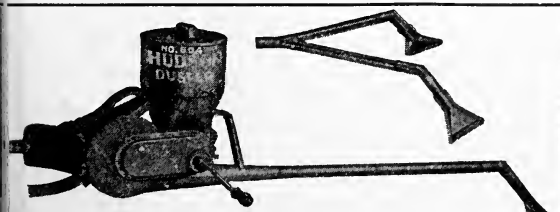


No. 663. Each 50c

HUDSON AUTOCRAT DUSTER

No. 667. 3 quart \$4.50

Hudson Crank Duster



No. 601. Each \$ 9.00
No. 604. Each 15.00

Hudson Perfection Junior Compressed Air Sprayer

TANK, 6 1/2 inches diameter, 17 inches long, capacity about 2 1/2 gallons. Made of first quality galvanized sheets. Tested under actual working conditions at the factory.

No. 140—G. Galvanized Tank.

Price, each \$4.75

No. 140—B. Brass Tank.

Price, each \$6.50



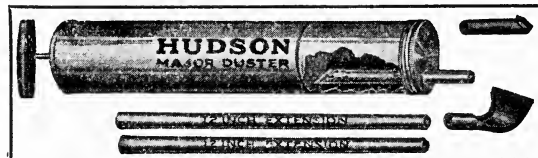
Hudson Leader

COMPRESSED AIR SPRAYER

A new Sprayer this year well made, reasonably priced.

No. 192. Galvanized Tank, 5 gal., \$3.75

Hudson Major Duster



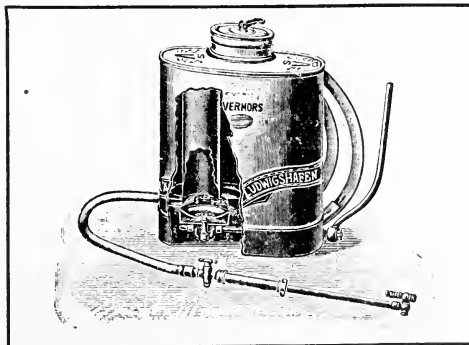
No. 665 \$1.25

Hudson Nozzles

No. 176 \$1.50
No. 16675
No. 16875
No. 71. Bordo, capacity 4 lbs. 1.00
No. 164 2.00



Platz Knapsack Sprayers and Dusters



Vermor's Brass Sprayer, capacity 4 gallons \$20.00
Green Double Action Duster, capacity 20-30 lbs. 22.00
Green Single Action Duster, capacity 20-30 lbs. 17.00
Green Hand Duster, capacity 4 lbs. 6.00
Famos Hand Duster, capacity 1 lb. 5.00

BELLOWS, DUSTERS AND SUNDRIES

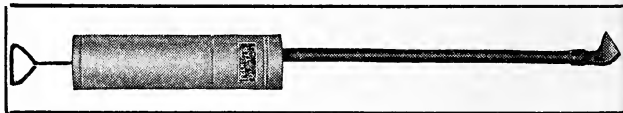
FEENY MODEL DUSTERS

Approved Dusters for Mexican Bean Beetle Control

THESE Dusters are efficient, durable and easy to operate and reload. They are equipped with extension tubes and special nozzles for dusting upward from underneath plants and vines. They are the approved type for Mexican Bean Beetle control and are recognized as standard dusting outfits for applying all kinds of powdered insecticides in fields, vineyards, gardens, etc.



ACME POWDER BELLOWS. It requires no base of supplies; all you need carry is a can of dry insecticide and bellows. Without stooping—the elbow does it—it applies any powdered poison on any plant in any desired quantity. The elbow may be detached, if desired. We also furnish a spreader for distributing the blast. Price, each.....\$1.75



The Model D Duster. 50 inches long, hopper holds 2 qts. Extra nozzle for general use. Price.....\$3.75

The Model BX Duster. 28 inches long, extra nozzle for flowers and gardens. Price.....\$1.25

The Model C Duster. Is used for dusting Insect Powder effectively. Price......75c

WOODASON'S POWDER BELLOWS. Single cone, small, \$2.75; single cone, large.....\$4.00

Standard Flower Pots, Azalea Flower Pots and Round Seed Pans

Size	Each	Dozen	Per 100
2 inch.....	\$0.03	\$0.30	\$2.00
2½ ".....	.03	.35	2.50
3 ".....	.04	.40	2.75
3½ ".....	.05	.45	3.25
4 ".....	.06	.50	4.00
5 ".....	.08	.75	6.00
6 ".....	.12	1.20	9.00
7 ".....	.18	1.75	14.00
8 ".....	.25	2.75	20.00
10 ".....	.60	6.50	
12 ".....	1.00	11.00	
14 ".....	1.75		

Flower Pot Saucers

Size	Each	Dozen	Per 100
4 inch.....	\$0.04	\$0.35	\$2.50
5 ".....	.05	.50	3.50
6 ".....	.07	.60	4.50
7 ".....	.10	1.00	7.00
8 ".....	.12	1.20	
10 ".....	.20	2.00	
12 ".....	.25	2.75	

Our Flower Pots and Saucers are standard make, of extra fine finish, and bear shipping well. No charge for Packing.

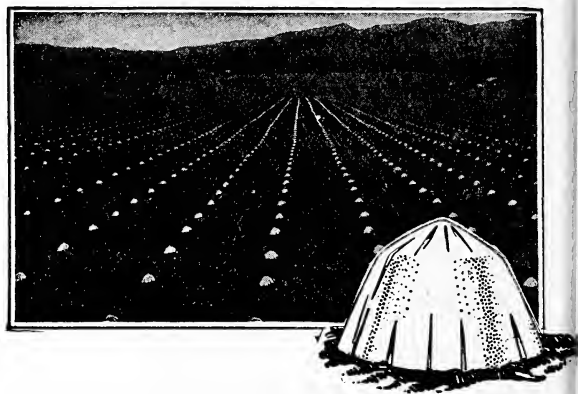
Growell Plant and Flower Pot

A NEW POT

Especially designed for use where transplanting is necessary and where it is desirable to avoid the usual set-back due to transplanting. Both pot and plant transplanted to field or beds without disturbing roots. Saves from 10 days to 2 weeks growing time. Increases profits. Used with great success by many growers.

PRICES

No.	Top Dia.	Bottom Dia.	Height	12 Pots	50 Pots	100 Pots	1000 Pots
2	2¼	1½	3	\$.50	\$1.75	\$3.00	\$20.00
3	3½	2½	3¾	.60	2.00	3.50	23.00
4	4½	3½	4	.75	2.50	4.25	25.00
5	5½	4	5	1.00	3.25	6.00	40.00
6	6½	5	6¼	1.25	4.25	7.75	50.00



Hotkaps

PROTECT PLANTS FOR PROFITS

Germaco Hotkaps can make you extra dollars this season. They protect plants from frost, wind, rain, insects and ground crusting. Thus they produce harder, quicker crops. You get higher prices! Thousands were used in 48 states last year. They cost but a fraction over a penny each. One man can "set" 3000 Hotkaps per day. They not only bring you higher prices, but are a method of crop insurance—against the danger of the elements.

PRICES ON HOTKAPS

Lots of 100, including tamper and setter.....	\$2.50
Lots of 250, including tamper and setter.....	4.00
1,000 lots—per 1,000.....	11.50
5,000 lots—per 1,000.....	11.00
Larger quantities—per 1,000.....	10.75
Hotkap Setters—Steel with Tamper, each.....	2.50

Postage or Express extra. Send for descriptive circular



READY TO USE

Paper Plant Bands and Pots

Packed 250 to a box.

Saves time and labor to anyone growing their own plants from seed.
Plant Bands. Size 2x2 in., depth 2½ in. Per 100, 40c; per 1000, \$3.50.
Pots with Folding Bottom. Size 3x3 in., depth 3 in. Per 100, 70c; per 1000, \$6.00.

Neponset Waterproof Paper Flower Pots

Lower In Cost Than Earthen Pots and Unbreakable.

For over twenty years florists, nurserymen and market gardeners have used the NEPONSET Flower Pot with entire satisfaction. The pot eliminates the troubles and loss caused to shippers of plants and nursery stock in clay pots. For transplanting and shipping potted plants, and for rooting or shipping Strawberry, Tomato and Cabbage plants, NEPONSET Waterproof Pots are almost ideal.

Size	Dozen	Per 100	Per 1000	Size	Dozen	Per 100	Per 1000
2¼ inch.....	\$0.10	\$0.60	\$ 5.00	3½ inch.....	\$0.20	\$1.15	\$10.00
2½ ".....	.10	.70	6.00	4 ".....	.25	1.40	12.50
3 ".....	.15	.85	7.50	5 ".....	.30	2.00	17.50



For description and prices on PLANT TUBS see page 89.

HORTICULTURAL TOOLS AND SUNDRIES

BASKETS, WIRE HANGING. 8-inch, 25c; 10-inch, 30c; 12-inch, 35c; 14-inch, 45c; 16-inch, 60c; 18-inch, 75c; 20-inch, 90c.

BASKETS, GARDEN AND FIRE WOOD..\$2.00 to \$6.50

CULTIVATOR, NORCROSS. Hand Garden. The Prongs are square spring steel bent corner-wise with forged shovels at the ends. The Socket Frame and Clamping Bar are made of toughest malleable Handle, best grade of White Ash. 5 Prong, 4 ft. Handle, each...\$1.25 3 Prong, 4 ft. Handle, each... 85c



CANE STICKS, NATURAL. 4 to 6 ft., per 100...\$1.75 7 to 9 ft., per 100...\$2.00 9 to 12 ft., per 100... 2.50

CANES. Japanese, green dyed, 2 feet long, per dozen, 15c; per 100...\$.75 3 feet long, per dozen, 15c; per 100...\$.75 4 ft. long, per dozen, 20c; per 100...1.00 5 ft. long, per dozen, 25c; per 100...1.25

DANDELION DIGGER. Made from steel...25c

DANDELION KNIFE, with long handle...\$1.00

DIBBLE. Iron, with wood handle; for transplanting plants. Price...75c

EDGING KNIFE. For cutting edges of walks and flower beds. Price...\$1.25

FORKS, DIGGING OR SPADING.....\$1.75 to \$2.00

FORKS, HAND-WEEDING. Small size, 25c; large size, 50c

FRUIT PICKER. Made of galvanized steel wire; attaches to pole of any length. Price, without pole...75c Closed Top...\$1.00

GARDEN LINE. Per ball of about 150 feet...\$1.00

GARDEN LINE REEL. Iron...\$1.50

GLASS CLOTH. A substitute for glass; per yard, 40c; 10 yards, \$3.50; 100 yards, \$32.00.

GLASS CUTTER, GOLD TIP. The best cheap cutter on the market. For all around usefulness we prefer it to a diamond. Each, 20c; per dozen...\$2.00

GLAZING POINTS, PEERLESS. Will stop your glass from sliding. Made of galvanized steel wire. No rights or lefts. Can be used on either side.

No. 1. For small single-thick glass. Per 1,000...75c

No. 2. For large single-thick glass. Per 1,000...75c

No. 2½. For double-thick glass. Per 1,000...75c

GLAZING POINTS, ZINC CITY. Are positively the best; last forever; a sure preventive of glass slipping. Effective on large or small glass; easy to drive, easy to extract. Per lb...60c



Grass Hook

GRASS HOOKS. American...50c

GRASS HOOKS. English, riveted back; No. 2...85c

GRASS HOOKS. English, riveted back; No. 3...\$1.00

GRASS HOOKS. With long handle...\$1.50

GRASS SHEARS. American. 50c, 75c, and \$1.00

GRASS SHEARS. Imported...\$1.75

GRASS SHEARS. With long handle...\$2.50

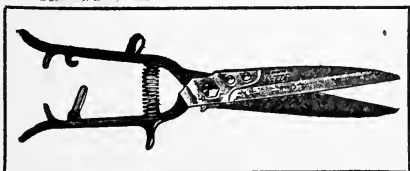
DOO KLIP SHEARS Long Handle...\$1.25

Pruners...\$1.75

Pruners...\$1.50

Wiss Grass Shears

Wonderful Cutters—Hold Their Edge



Fine tempered cutlery steel blades, comfortable handles, cut easily. Don't tire the hand—stay in adjustment. Price...\$1.60

GUNS, INSECT POWDER. JUMBO.....35c

HEDGE SHEARS. American, 6-in., \$1.50; 8-in., \$2.50. 9-in., \$2.75.

HEDGE SHEARS. English, 8-in., \$3.25; 9-in., \$3.50

HOES, STANDARD SOCKET GARDEN.....\$1.00

HOES, ONION. One end square; opposite end one prong...50c

HOES, ONION. One end square; opposite end two prongs...60c

HOES, GRUBBING. With handle...\$1.00

HOES, SANDUSKY.....\$1.00

HOES, ENGLISH SCUFFLE OR PUSH. Without handle...\$1.25

HOES, AMERICAN SCUFFLE. 8-in. with handle...\$1.25

HOSE, RUBBER. (See Lawn Requisites Page 88.)

KNIVES, PRUNING.....\$1.25 to \$2.00

KNIVES, BUDDING.....50c to 3.00

KNIVES, ASPARAGUS. American...40c

LABELS, WOOD. For pots, painted:

	Per 100	Per 1000
4 x ¼-inch.....	\$0.30	\$2.50
5 x ¼-inch.....	.35	3.00
6 x ¼-inch.....	.40	3.50
8 x ¼-inch.....	.90	8.00
10 x ¼-inch.....	1.00	9.00
12 x 1 ¼-inch.....	1.25	11.50

LABELS. Tree, notched, copper wired: Per 100, 35c; per 1,000...\$3.00

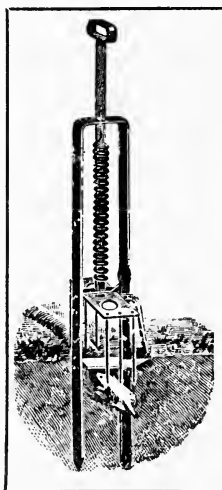
LABELS. Tree, copper; No. 1, per 100...1.50 No. 2, per 100...2.00

LABELS, PYRALIN WATERPROOF.

Pot Labels, 4-inch, per 100, 40c; per 1,000, \$3.00 Tree Labels, copper wired, 3 ½-inch, per 100, 60c; per 1,000, \$5.00.

LAWN ROLLERS, LAWN MOWERS, ETC.

See page 91.



MASTICA. For glazing green-houses. The use of Mastica avoids the necessity of repeatedly reglazing the house, saving much time and expense. One gallon will cover about 300 running feet (one side). One gallon...\$2.75

MASTICA GLAZING MACHINE.....\$2.75

MATCH PLANT STICKS, painted green. 12-inch, per 100, 30c; per 1,000, \$2.50. 18-inch, per 100, 40c; per 1,000, \$3.00.

MATTOCK, LONG CUTTER. With handle...\$2.60

MATTOCK, CRONK'S GARDEN.....\$1.00

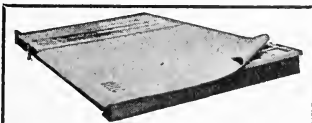
MOLE-TRAP, LITTLE GIANT. The best trap on the market. No mole can pass under this trap and live...\$1.25

OIL, LAWN MOWER. This is a handy can filled with fine oil, manufactured expressly for lawn mowers, bicycles, etc. Per can...20c

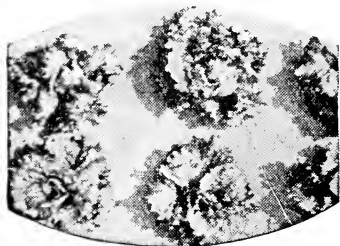
Milo Hot Bed Mats

Made from heavy weight burlap, absorbent pulp and felt cemented together with a specially prepared water-proof compound.

This combination forms a covering both airtight and waterproof. Also make ideal truck covers for marketing vegetables. Size 78x80 inches. Price...\$5.00



HORTICULTURAL TOOLS AND SUNDRIES—Continued



Gator Hide Mulch Paper

Saves weeding
and cultivating.
Assures larger
crop. Ask for
Special Circular.

Grade A, Light, 18 in. wide, per roll 300 yds. \$3.50
Grade A, Light, 36 in. wide, per roll 300 yds. 7.00
Grade B, Heavy, 18 in. wide, per roll 150 yds. 3.50
Grade B, Heavy, 36 in. wide, per roll 150 yds. 7.00
Garden Size..... 1.00

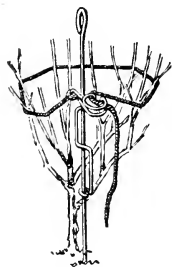
Moss, Green Sheet. For hanging baskets, etc. Per bale, 50c; large bund (5 bales), \$2.00

Moss, Sphagnum. For packing plants and growing orchids, etc. 1 lb., 15c; per bale, \$2.50.

Potting Soil. Peck, 35c; per bushel, \$1.25.

PLANT STAKES, (wood, painted green) $\frac{3}{8}$ by $\frac{1}{4}$ inch, 6 feet long, per dozen, 75c; per 100, \$5.00; $\frac{1}{2}$ by $\frac{1}{4}$ inch, 6 feet long, per dozen, \$1.00; per 100, \$7.50

PLANT STAKES (wire rods for Plants).
9 inches long, per dozen, 20c; per 100..... \$1.25
With Pyralin Labels, per dozen, 30c; per 100..... 2.00



Time Saver Plant Supports

No. 1. 30 in. long, per dozen... \$.95
No. 2. 36 in. long, per dozen... 1.15
No. 3. 42 in. long, per dozen... 1.60
No. 3a. 48 in. long, per dozen... 2.20
No. 4. 60 in. long, per dozen... 2.75
No. 4a. 72 in. long, per dozen... 3.05

Case Plant Sticks

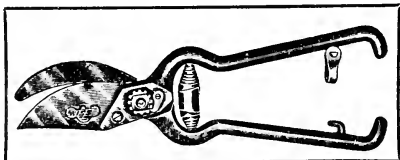
3 ft. long—\$1.00 per doz.; \$2.00 per 25;
\$6.00 per 100.
4 ft. long—\$1.40 per dozen; \$2.50
per 25; \$9.00 per 100.

PRUNING KNIVES, TREE

Happy Thought. Will cut a limb three-quarters of an inch in diameter. 6 ft. Price..... \$2.00

Waters. 8 ft., \$2.00; 10 ft., \$2.25; 12 ft., \$2.75.

Pruning Shears. Lopping shears: 24-inch handles..... \$2.75



PRUNING SHEARS, HAND

Wiss heavy, extra fine quality, 9-in. \$3.50
Wiss, Shear Steel, 9-inch..... 2.50
Ladies' Hand..... 1.50

PUTTY, TWEMLOW'S LIQUID.

GLAZING. For bedding glass in sash or for filling cracks or seams in roof joints or frames of greenhouses or hotbeds. It is applied with machine, bulb or brush. One gallon will cover about 600 running feet (one side). Gallon..... \$3.00

PUTTY, BLACK, PEERLESS GLAZING CEMENT. For glazing greenhouses. Durable and inexpensive. Apply with machine. Gallon, \$2.00.

PUTTY BULB. A useful tool for applying liquid putty when glazing greenhouses..... \$1.35



Happy
Thought

RAFFIA, NATURAL. The best tying material for plants, also used for making hats, baskets, etc. Per lb., 60c; 5 lbs., \$2.50.



RAFFIA, COLORED. For making baskets and fancy work in following colors: Black, Blue, Brown, Green, Orange, Pink, Red and Yellow. 1 oz., 20c; 1 lb., \$1.50.

SAWS, PRUNING, 16-inch, \$1.25; 18-inch..... \$1.50

SAWS, PRUNING, DISSTON SWIVEL. Swiveled in steel frame to cut in any position..... \$2 50

SASH, HOTBED, UNGLAZED. Made from strictly clear cypress lumber. White lead used on the tenons, and iron dowel pins at the corners.

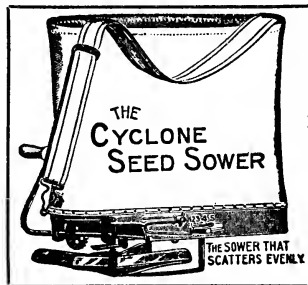
No. 1. 3 x 6 ft., three rows, 10-inch glass, each \$3.50

No. 2. 4 x 6 ft., five rows, 8-inch glass, each... 4.50

SCYTHES, WALDRON, ENGLISH LAWN. 30-inch, \$2.75; 32-inch, \$3.00; 34-inch, \$3.25.

SCYTHES SNATH PEERLESS. Each..... \$1.50

SCYTHE STONES, TALACRE. English round..... 40c



SEED SOWER, CYCLONE.

For sowing wheat, oats, rye, flax, grass seed, clover seed, etc.; in fact any kind of seed, broadcast. They will save their cost almost daily in saving of seed, to say nothing about saving of time and more even distribution, which will have a great effect on the crop.

Price..... \$2.00

SEED SOWER, CAHOON BROADCAST. The standard broadcast Seeder and one of the best manufactured. Sows all kinds of Grain, Clover, Timothy and heavy seeds. Has a capacity of 4 to 6 acres per hour at a common walking gait and distributes seeds uniformly in about one-fifth the time required by hand. Very simple in operation and easy to adjust for quantity. Price..... \$5.00

SHOVELS, STEEL. Square point..... \$1.75

SHOVELS, STEEL. Round point..... 1.75

SPADES. Steel polished..... 1.50

SPADES. Ames steel..... 2.50

SPADES, NURSERY. Steel, extra heavy strapped. 3.50

SPADES, DIGGING..... 1.50



SPRINKLER, RUBBER, SCOLLAY'S.

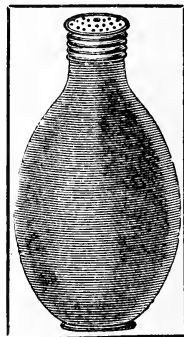
Indispensable for floral work and window gardening. Large size..... \$1.35

THISTLE OR DOCK

CUTTERS. Narrow blade, with handle for removing thistles or weeds from lawns, with foot rest... \$1.25

THERMOMETER

No. 5150, 8-inch... 50c



THERMOMETERS

Medium Grade..... 8-inch, 60c; 10-inch. \$.75
Dairy, 10-inch glass..... .50

Hotbed or Mushroom..... 2.75

Incubator. Prairie State..... 1.00

Incubator. Buckeye..... 1.00

Brooder. Prairie State..... 1.00

TROWELS. Maynard steel shank, 6 $\frac{1}{2}$ inch..... .75

Heavy Wooden Handle..... .90

English Steel, 6-inch..... .60

Solid Shank, Forged Steel, 6-inch..... .60

Solid Steel, 6-inch..... .40

All Steel, one piece, 6-inch..... .25

Ordinary, 6-inch..... .15

TROWEL, TRANSPLANTING. 6-inch, 25c; 8-inch, 30c.

WAX, GRAFTING. $\frac{1}{4}$ lb., 25c; $\frac{1}{2}$ lb., 40c; 1 lb., 60c.

By mail Add 7c a Pound.

HORTICULTURAL TOOLS AND SUNDRIES—Continued

Long Spout
Made from
best quality
of iron, and
heavily gal-
vanized. Two
roses with
each pot for
fine and coarse watering.
6-quart. \$4.25
8-quart. 4.75
10-quart. 5.25
12-quart. 6.00
Ladies' size 4-qt. 4.25

COLORED WATERING POTS

2 Quarts. \$1.00
4 Quarts. 1.25

WEEDERS

Cleveland Lawn, with long handle for removing weeds. \$1.25
Magic. 3-prong, short handle. 20c
Magic. 3-prong, long handle. 50c
Excelsior. For weeding seed beds, stirring the ground, etc. 15c
Market Gardener's. Allows use of hands in working. 25c

WATERING POTS GALVANIZED



Magic Weeder



DIAMOND WEEDER The Gardener's Favorite. 25c

IDEAL HAND WEEDER
It fits the hand so comfortably that the fingers are entirely free for use wherever necessary. 25c

"Out-U-Kum" Weed Puller

A slight push and pull removes not only the weed, but the entire root. A perfect weed puller.

Each. \$0.75

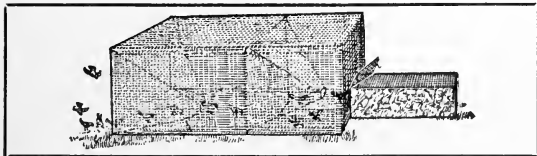
Wire Folding Plant Stand

The most compact, strong, durable Plant Stand. They pack closer than any other plant stand for shipment. The ends are made of flat steel and have porcelain castors. Can be opened or folded in a few seconds time by simply spreading the stand apart at the bottom, and dropping the cross bars into their places.

There is more room for the pots and foliage than on any other plant stand that takes the same amount of room on the floor.

3 Tray Stand—Trays 7 1/2 in. wide x 30 in. long. \$6.00
2 " " " 7 1/2 " " x 30 " " 4.50
1 " " " 10 " " x 33 " " 3.00

The Dodson Improved Sparrow Trap



The Dodson Sparrow Trap is made of tinned wire, electrically welded, strong and durable—will last for years. It has sharp, adjustable needle points projecting from the mouth of each of the two funnels, which effectively prevent any sparrows from getting out of either the front or second enclosure. Size 36 x 18 x 12 inches.

Price, complete with receiving box. \$9.00

The Perfecto Flower Box



The Perfecto Flower Box is recognized by scientific gardeners and florists as the correct idea in construction for growing house plants and porch plants. The problem is solved by means of the patented self-irrigating and air-circulating system.

Water can be poured in either end of box and quickly seeks the level of the connecting troughs and rises into the earth to the roots of the plants where you want it.

The drainage plug in the end is removable, to be taken out only when the box is in the open and during heavy rainfall.

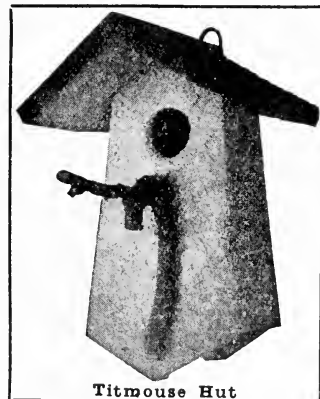
The material used in construction is coppered-steel, with a lead coat, which will neither rust nor deteriorate like plain galvanized iron and is the best material procurable for a long-life flower box to be continually under moisture. It is light in weight.

20 inches long, 6 in. deep, 7 in. wide. \$1.00
26 inches long, 6 in. deep, 7 in. wide. 1.50
32 inches long, 6 in. deep, 7 in. wide. 2.00
38 inches long, 6 in. deep, 7 in. wide. 2.50
44 inches long, 6 in. deep, 7 in. wide. 3.00

Stucco Bird Houses

THE birds which nest and harbor in cavities and hollows are in most instances the most valuable of our native birds, which love the vicinity of man, seemingly not only to delight him with chirp and song, but are the most diligent to keep plant life free from parasites and devouring insects.

Our model hutlets and cabins which we provide for these charming entertainers are appreciated by all bird lovers.



Titmouse Hut

PRICE LIST OF HUTS AND CABINS

Wren Hutlet, each. \$2.75 Bluebird Hut, each. \$3.00
Titmouse, each. \$2.75 Chickadee Hutlet, each. 2.75
Woodpecker and Flicker Hut, each. 3.00
Martin Houses \$8.00 to 50.00
Feederies, Small \$2.75 to 5.00
Squirrel Cabins, each. 8.00
Wren Hutlet, Rustic, Small, each.50
Blue Bird, Rustic, Small, each.60

BIRCH BARK BIRD HOUSES

Wren Hut. \$1.25 Blue Bird Hut. \$ 2.25
24 Apartment Martin House. 16.00

RUSTIC BIRD HOUSES

No. 1—Wren. \$1.25
No. 9—Blue Bird. 2.50
No. 6—Chickadee. 1.50
No. 7—Woodpecker. 2.00

Suet Holder

Neat, durable, inexpensive, effective.

Suet is most attractive to chickadees, nuthatches and downy woodpeckers. Fill the holder, snap the lid down and hang it on a nail or a twig. The birds will do the rest. Each. 60c
Large tree holder. 75c

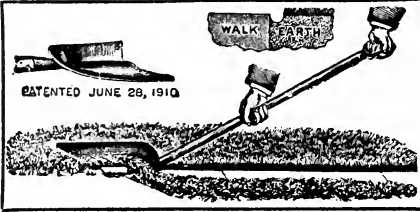
Postage First and Second Zones. 7c each, extra.

LAWN REQUISITES

Imperial Lawn Edge Trimmer

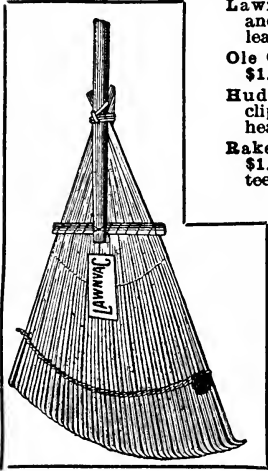
Con-
venient
to
Handle

Moderate
in
Price



The Imperial Lawn Edge Trimmer trims the rough, straggling, overhanging grass along the walk. It plows a clean U-shaped trench, and does the work in a fraction of the time required by less efficient tools. \$1.50

Lawn and Garden Rakes



Lawn Queen. Wire: is reversible and can be used for grass or leaves, 24 teeth. \$1.00

Ole Olsen. Made of best hickory, \$1.00.

Hudson Dandelion Rake. For clipping off daisy and dandelion heads. \$1.25

Rakes, Steel Garden. 12 teeth, \$1.00; 14 teeth, \$1.25; 16 teeth. \$1.40

Japanese Broom Rake

An ingenious device for cleaning the debris out of a lawn or grass plot, leaving it as free from refuse as though swept with a broom. In fact, to get the best results it should be used with the motion of a broom. Made of split bamboo, rigidly secured, with a suitable length handle. Just the

thing for cleaning grass clippings from walks, flower beds, borders and from the lawn. Light, durable—efficient—weighs but 12 ounces—yet tough and strong. Contains 44 teeth. Spreads 18 inches. Price. \$0.75
42 teeth. Spread 16 inches. Price. 0.50

FERTILIZE as you Sprinkle with the JECTOR Fertilizing Nozzle



Takes the place of the regular garden hose nozzle. Applies any and all fertilizers and plant foods to lawns, gardens, trees and shrubs. The easy, rapid, safe way approved by fertilizer makers to apply their products evenly, properly and without danger of "burning." Simple to operate. Merely put any fertilizer in a bucket. Fill the bucket with water. Attach nozzle to garden hose. Drop suction tube into bucket of fertilizer solution and turn on the water. The JECTOR does the rest. Action is visible at all times; operation is continuous; no water to be shut off, jars or tanks to be opened and frequently re-filled this modern way. The only device that can be instantly changed to discharge either fertilizing solution or clear water for rinsing or washing down.

APPLIES all fertilizers, grass seeds, insecticides, lime, disinfectants, oil emulsions, crank case oil to lay dust, etc.
USED ON lawns, gardens, shrubs, trees, in henneries and outbuildings, to oil roadways, to kill chiggers, etc.
Made of solid brass; special rubber tubing resists chemicals. Guaranteed satisfactory when used as directed. Individually packed complete with nozzle, rubber tube and valuable booklet of instructions and suggestions.

Each. \$1.50

Rainbow Lawn Sprinkler

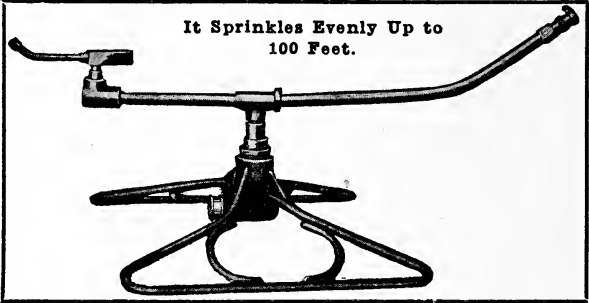
What Rainbow Lawn Sprinklers Will Do. Revolve Rapidly on any Pressure.

Wearing and friction almost eliminated by use of water absorbing fibre washers. Made of Brass. Will not stick or corrode. Heavy Steel Sled. Green enameled stand. Distributes about 5 gallons of water per minute evenly over every portion of ground, 20 feet from sprinkler. Will indefinitely, without repair or attention, do the work it was built for.

No. 5 1/2—Stands 7 inches high; 7-inch revolving head. . . \$2.50

"Evergreen" Sprinkler

For Large Lawns, Parks, Estates, Cemeteries



It Sprinkles Evenly Up to 100 Feet.

The Main Stream soars far out, revolving very slowly and covering a broad outer circle.

The Small Rotor turns at moderate speed, completing the even distribution to the center; its vibrating impulse, a patented feature, makes possible the perfect control of the main stream at slow speed, the far throw of the main stream and its scattered rain-like distribution.

The Elimination of Gears and Complicated Wearing Parts means Long Life, without constant repair.

The Nozzle has Spray Adjustment. Wind will not stop it. A Labor Saver, the far throw saves frequent setting. Price \$10.00.

Lark Sprinkler

For Golf Greens and Fairways, Parks and Large Estates



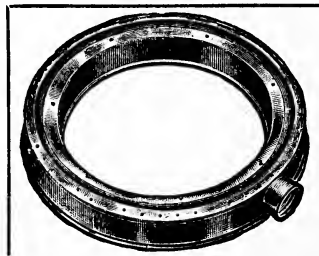
It Sprinkles Evenly Up to 150 Feet

Similar to the "Evergreen" except larger capacity. The Roller Base prevents damage to greens and allows changing position without shutting off the water.

Write for descriptive circular.

Price \$15.00

Ring Lawn Sprinkler



The simplest lawn sprinkler made. No revolving parts to wear and get out of order or leak. Easily moved about the lawn. Made of polished brass. Light, durable and economical. Each. 75c

Market Gardener's Sprinkler

Every Market Gardener, Florist, and others who use a hose for watering hot beds, cold frames, gardens and lawns should have one of these sprinklers. Simply attach to hose in place of nozzle.

Copper Head, each. \$1.50

LAWN REQUISITES—Continued

The Dayton Rotary and Oscillating Sprinkler

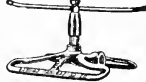
THE most practical, durable, efficient machine ever devised for sprinkling lawns, parks, or irrigating truck gardens. Saves time, labor, hose wear. Dayton Lawn Sprinklers are fitted with $\frac{1}{4}$ -inch or $\frac{1}{2}$ -inch hose connections, as may be desired.



Lawn Type
Style A.
Price.....\$8.00

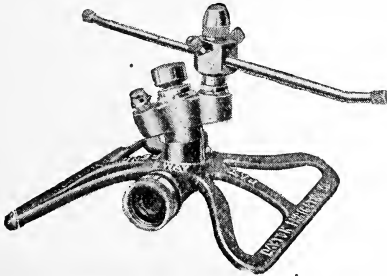


Lawn Type
Style B.
Price.....\$3.75



Lawn Type
Style C.
Price.....\$2.00

The "Three-Way" Sprinkler



This unit gives three kinds of sprays:

- 1—a whirling spray that operates on as low as 5 lb. pressure and has 48 ft. circular spread under 35 lb. water pressure.
- 2—an intensified spray to cover a circle from a few feet up to 23 feet, as desired.
- 3—a half-spray for oblong or narrow spaces in garden or lawn, or for curb strips.

Price.....\$4.00

"Garden Fairy" Sprinkler

The Whirling Fairy Head, mounted on a 5 foot standard, delivers a large volume of water over a very large area. Its coarse jets of water make it especially adapted for efficient operation in wind.

The bearing has very long life. It is especially adapted for use in high garden and flower growths.\$18.00

Garden Hose and Appliances

Hose, Rubber, "Non-Kink," best hose on the market, finest quality of rubber being used in its manufacture. Will not kink and will last for years. We can supply in any length. $\frac{1}{4}$ -in., 12c per ft.; $\frac{3}{8}$ -in., 13c per ft.

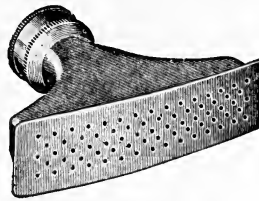
Hose, Target. 2 braid, a good hose for general purposes. $\frac{1}{2}$ -in., 10c per ft.; $\frac{3}{8}$ -in., 11c per ft.

Hose. For Paragon Spray Pumps. Per ft.\$0.20

Hose Reel. Iron.\$2.50 to 4.00

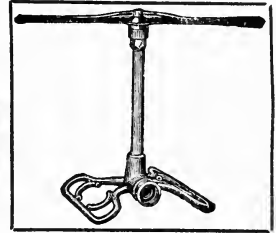
Hose Coupling Bands. Each, 10c; per dozen 1.00

Hose Coupling Bands. For Paragon Pump, each... .10



Flaring Rose Sprinkler

Attach to hose in place of nozzle.Each 75c



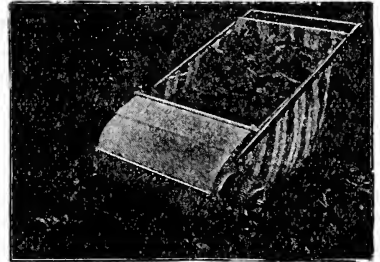
Whirling Fairy Lawn Sprinkler

Light, durable, will operate on very low pressure.Each.....\$1.50

Pennsylvania Lawn Cleaner

This machine will clean your lawn more thoroughly and quicker than three or four men can do it with hand rakes, and greatly benefit the turf—it leaves the grass standing up straight and straightens up crab grass and other running weeds so they will be cut close by the lawn mower and sooner destroyed. In the autumn it takes up the heaviest fall of leaves. It is made of metal, wood and canvas, and is put together in the most durable and thorough manner. It combines strength and durability with light construction. Price.....\$35.00

We can now supply a brush attachment for the purpose of sweeping worm casts on Putting Greens. This attachment can be readily attached to the cleaner, in place of the rakes now supplied, at an additional cost of \$8.00.



McCullough's Plant Tubs

An excellent tub, neat and durable. Made from $\frac{1}{4}$ -inch Cypress with iron handles and feet, 3 steel hoops and 2 coats of green paint.Each

No. 7—12 inches diameter, 11 inches high	.....\$2.50
No. 8—13 " " " "	.....2.75
No. 9—14 " " " "	.....3.00
No. 10—15 " " " "	.....3.25
No. 11—16 " " " "	.....3.50
No. 12—17 " " " "	.....3.75
No. 13—18 " " " "	.....4.25
No. 14—19 " " " "	.....4.75

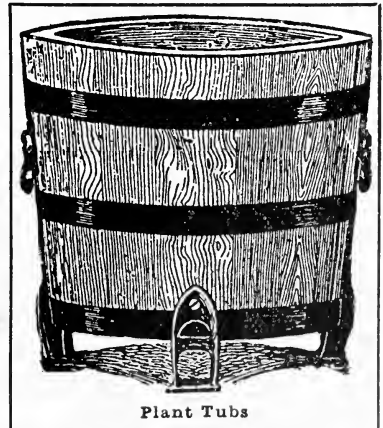
Cypress Plant Tubs

Made of seasoned selected Cypress, bound with steel hoops. Painted green, inside and out, and top edge finished with round bevel. No feet, but furnished with iron handles.Each

No. 7—12 inches diameter, 11 inches high	.....\$2.00
No. 8—13 " " " "	.....2.25
No. 9—14 " " " "	.....2.50
No. 10—15 " " " "	.....2.75
No. 11—16 " " " "	.....3.00
No. 12—17 " " " "	.....3.25
No. 13—18 " " " "	.....3.75
No. 14—19 " " " "	.....4.25

Pine Plant Tubs

No. 4, Each. ....\$0.85	No. 9, Each. ....\$2.20
No. 6, Each. ....1.40	No. 12, Each. ....3.00
No. 7, Each. ....1.60	No. 14, Each. ....4.00

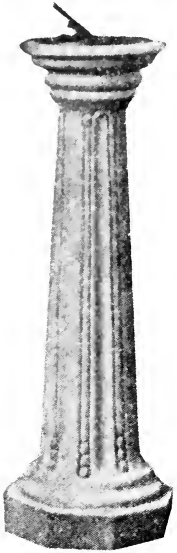


Plant Tubs

GARDEN ORNAMENTS, TRELLISES

Gazing Globe, Sun Dial and Bird Bath

The Gazing Globe, Sun Dial and Bird Bath enhance wonderfully the beauty of the lawn or garden, and add interest to life.



SUN DIALS
\$5.00 to \$10.00 each.



BIRD BATHS

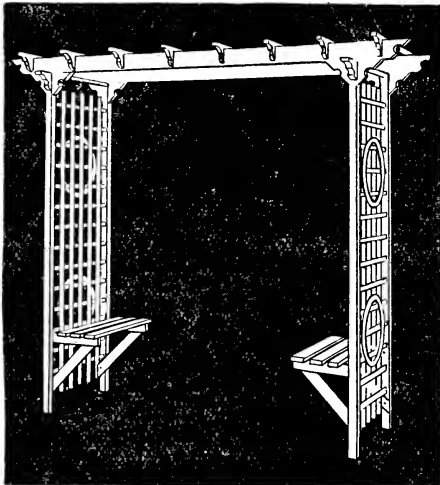
Should be in every garden. We have them from \$5.00 to \$10.00 each.

SILVER GAZING GLOBES

7 in.....	\$3.50 each
8 in.....	4.25 each
10 in.....	7.50 each
12 in.....	9.00 each
14 in.....	10.50 each
16 in.....	14.00 each

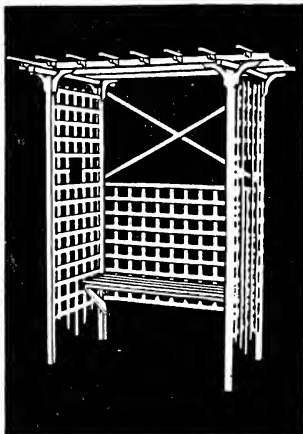
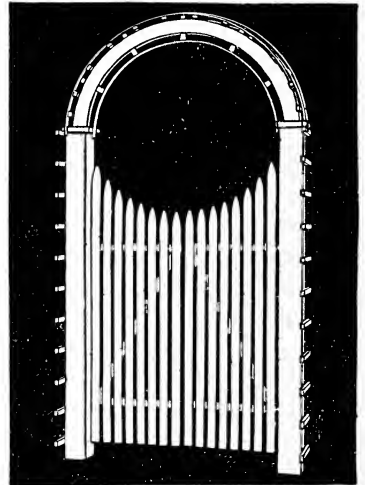
STONE PEDESTALS

37 in. tall.....	\$ 5.00
42 in. tall.....	7.00
51 in. tall.....	10.00

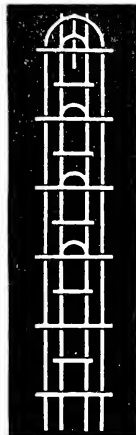


No. 78.
Tee Beverly Pergola
\$16.50 each

No. 132.
Dreamland Gateway
\$18.00 each

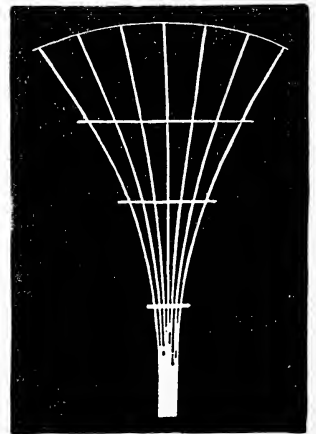


No. 123.
Shady Nook
Pergola
\$22.80 each



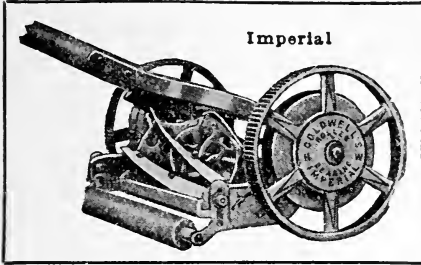
No. 108.
Wildwood Trellis.
\$2.80 each.

Fan Trellis
No. 6.....\$1.40
No. 8..... 1.70



We Have Many Other Trellises to Show You

LAWN MOWERS



Imperial

Coldwell's Imperial Roller Bearing High Wheel Mower

THE Imperial Roller Bearing Mower is nicely balanced, enabling the operator to handle it with ease. Furnished with five blades in revolving cutter. Specially designed to meet the demands of park and cemetery superintendents. Durable, light running, easy to push and requiring minimum of attention to adjustments. Roller bearings enclosed in dust proof housings. When packed with light grease will need no further oiling for the season. Best Lawn Mower on the market for hard service in parks, cemeteries, etc.

16-inch.....\$17.00 18-inch.....\$19.00 20-inch.....\$21.00

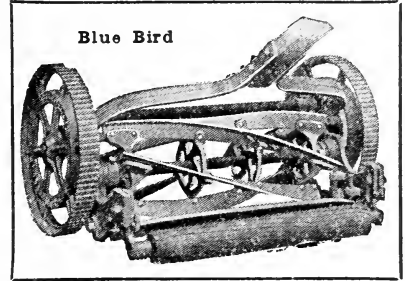
Coldwell's Blue Bird Ball Bearing Mower

In the "Blue Bird" we have a high-grade, light weight machine, which is positively the best five blade, 10-inch wheel, ball bearing lawn mower ever built for the price asked. It is provided with flat, sliding pawl ratchet, with direct drive from both sides. The gears are enclosed and protected from flying grass and dirt. The ball bearings are of finest drop-forged steel, case hardened. Height of cut ranges from $\frac{1}{2}$ to $1\frac{1}{2}$ inches, at pleasure of operator. Made in three sizes: 14-inch, \$12.00; 16-inch, \$13.00; 18-inch, \$14.00.

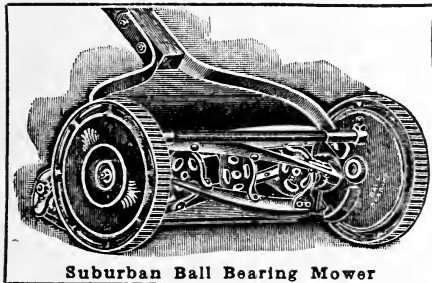
Cadet Lawn Mower

IS a good Lawn Mower to sell at a medium low price and give the purchaser full value for his money.

14-inch.....\$6.75 16-inch.....\$7.50



Blue Bird



Suburban Ball Bearing Mower

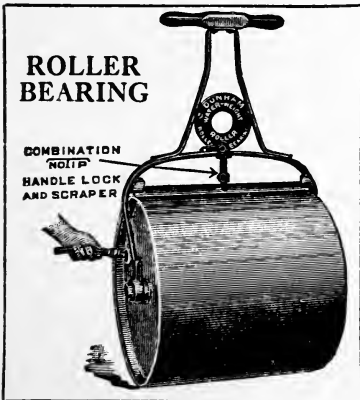
Suburban Ball Bearing Mower

IS MADE to meet the demand for a good ball bearing machine, which can be purchased at a price within the reach of all. It is made throughout of the best grade material. The driving wheels are 8 inches in diameter. The revolving cutter has four blades, which insures fineness and evenness of cut. It has sliding pawl ratchets, and the adjustment of both bearings and bottom knife is the simplest and most effective ever made. One screw only is required to adjust the bearings, by means of which all looseness in the revolving cutter bearings can be taken up.

14-inch.....\$9.25 16-inch.....\$10.00

Coldwell's Lawn Trimmer

IT IS equipped with fine cut gears, sliding-pawl ratchet, the best tool steel bottom knife and is made to meet the demands for a really first-class trimmer. Price.....\$10.00



ROLLER BEARING

COMBINATION
"NO-TIP"
HANDLE LOCK
AND SCRAPER

Nox-All Grass Catchers

No. 500. Made to fit mower, 12 to 16 inches.....\$1.00
No. 510. Made to fit mower, 16 to 22 inches.....1.25

Dunham Water-Weight Lawn Rollers

WITH ROLLER BEARINGS

Dunham Water-Weight Rollers are electric welded—no rivets used—the drum cannot possibly leak.

The Dunham Water-Weight Roller can be made as heavy or as light as desired by simply putting in the right amount of water. For storing away or for moving, it can be emptied entirely and is light and easy to handle.

W. B. Style. Is equipped with a "No-Tip" lock and scraper. The lock holds the handle upright when not in use.

W. B. No. 5. 1 section, 24 inches long and 18 inches in diameter. Weight, empty, 85 lbs.; weight, filled with water, 300 lbs.; weight, filled with sand, 450 lbs. Price.....\$15.00

W. B. No. 7. 1 section, 24 inches long and 24 inches in diameter. Weight, empty, 110 lbs.; weight, filled with water, 500 lbs.; weight, filled with sand, 750 lbs. Price.....\$18.00

Durham Water-Weight Lawn Rollers WITH PLAIN BEARINGS

No. 1. 1 section, 15 in. long and 14 in. in diameter, weight empty, 45 lbs.; weight filled with water, 115 lbs.; Price \$ 9.50
No. 2. 1 section, 24 in. long and 14 in. in diameter, weight empty, 68 lbs.; weight, filled with water, 177 lbs.; Price 10.00
No. 4. 1 section, 24 in. long and 18 in. in diameter, weight empty, 82 lbs.; weight, filled with water, 265 lbs.; Price 12.50

DUNHAM ROLLERS are painted green on body and ends with red handles and always bear the name DUNHAM

"PLANET JR" FARM AND GARDEN TOOLS

PLANET Jr. means, on a farm or garden tool the world over, that it is the latest improved, lightest, strongest, most useful and economical tool of its kind. With Planet Jrs. come less work, bigger crops, more money. The Planet Jr. Catalogue is an instructive handbook of short cuts to best results for farmers and gardeners. It illustrates fifty-five latest improved Planet Jr. tools, showing many in use. Seventy-two helpful pages. Write for it at once.

The "Planet Jr" Seed Drills



No. 4 Planet Jr. Hill and Drill Seeder, Single Wheel Hoe, Cultivator and Plow Combined.
Price, \$18.00.

PLANTS all garden seeds accurately in hills, 4, 6, 8, 12 or 24 inches, or in drills any thickness. Hoes, cultivates and plows quickly and thoroughly. Popular with farmers and gardeners everywhere.

No. 4D. Planet Jr. as a Hill and Drill Seeder only, \$14.25.

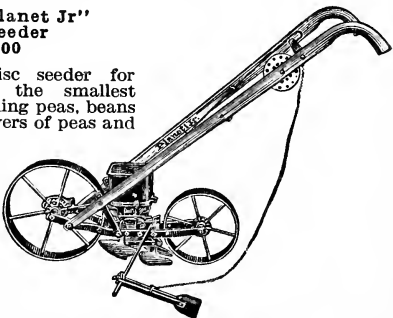


No. 25. Planet Jr. Combined Hill and Drill Seeder, Double Wheel Hoe, Cultivator and Plow, Steel Frame.
Price, \$21.50.

THIS combined machine is intended for gardeners who have a large enough acreage in crops for a Double Wheel Hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately.

No. 300 "Planet Jr" Drill Seeder
\$20.00

A plate or disc seeder for all seeds from the smallest up to and including peas, beans and corn. Growers of peas and beans will appreciate this seeder as it does not break the seed and sows with great regularity. Only three plates each with thirteen holes, making ample adjustment for various seeds. Hopper holds four quarts and is removable which makes easy filling and emptying.



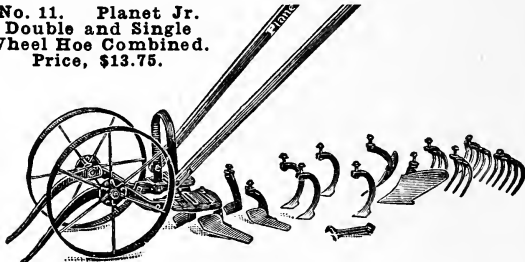
Attachments

Hoes, Complete, 4 1/2 inches, per pair	\$1.20
Hoe Steels, 4 1/2 inches, per pair	.70
Hoes, Complete, 6 inches, per pair	1.30
Hoe Steels, 6 inches, per pair	.80
Disc Hoes, per pair	3.50
Cultivator Teeth and Bolt, each	.40
Cultivator Teeth, Three Prong, per pair	1.75
Onion Harvester, 8 inches, each	1.60
Plows for Double Wheel Hoes, M5/N5, per pair	1.40
Plow Steels for Double Wheel Hoes, per pair	.80
Plows for Single Wheel Hoe R6, each	1.10
Plow Steels for Single Wheel Hoe, each	.60
Plows, Double Mouldboard, each	1.75
Rakes, 3-Teeth, each, 45c; 5-Teeth, each	.75
Handles for Single or Double Wheel Hoes, per pair	1.00

The "Planet Jr" Double Wheel Hoes

ARE the greatest cultivating tools for every grower of garden crops from drilled seed. They do more and do it better and easier than can possibly be done in any other way. Works both sides of plants thoroughly and rapidly at one passage until crops are 20 inches high. Indestructible steel frame and steel leaf lifters.

No. 11. Planet Jr. Double and Single Wheel Hoe Combined.
Price, \$13.75.



Has two 6-inch hoes, two 4 1/2-inch hoes, four steel cultivator teeth, two plows, two 3-tooth rakes, two 5-tooth rakes, two leaf lifters, two 14-inch steel wheels and steel frame.

No. 12 Planet Jr. Double and Single Wheel Hoe Combined

Has two 6-inch Hoes, 4 steel cultivator teeth, two Plows, two Leaf Lifters, steel Frame and 14-inch Steel Wheels.
Price.....\$10.75.

"Planet Jr" Single Wheel Hoes

WE offer these Single Hoes as the highest type of their class. They have a great variety of tools which adapt them to a large variety of work, and there is scarcely any garden culture of which they are not capable.

No. 16. Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow. Price, \$9.00.

Has two 6-inch Hoes, three Cultivator Teeth, one large garden plow, one 3-tooth Rake, one 5-tooth Rake, one Leaf Guard, one 15-inch Steel Wheel and Steel Frame.

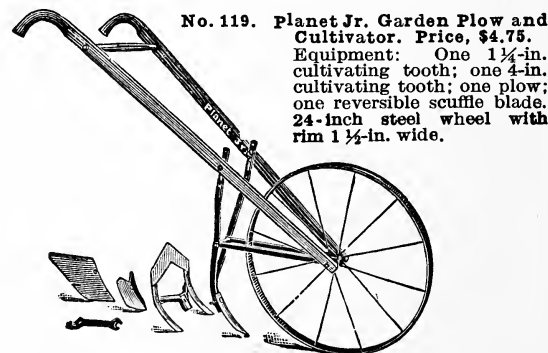
No. 17. Planet Jr Single Wheel Hoe

Has two 6-inch Hoes, three Cultivator Teeth, one large Garden Plow, one 15-inch Steel Wheel and Steel Frame.
Price.....\$7.75

No. 19. Garden Plow and Cultivator

Here is a real rugged built-for-service tool especially designed for the farmer's home garden and vacant lot farming where an extra strong, all-purpose tool is needed. An inexpensive tool, but mighty dependable and effective.

Has one 2-inch Cultivating Tooth, one 10-inch Sweep, one Plow, one 5-prong Cultivating Attachment, one 15-inch Steel Wheel. Price.....\$5.90



No. 119. Planet Jr. Garden Plow and Cultivator. Price, \$4.75.

Equipment: One 1 1/4-in. cultivating tooth; one 4-in. cultivating tooth; one plow; one reversible scuffle blade. 24-inch steel wheel with rim 1 1/4-in. wide.

This new number of the "Planet Jr." family will appeal to all those who prefer a high wheel for their garden work. Where the soil has not been so thoroughly and carefully prepared, the high wheel undoubtedly makes an easy running tool. The handles are strong and are provided with "plow handle" grip. Adjustable for height for adult or child.

Planet Jr. No. 2 Edger

With this tool you can edge either straight or curved walks of cement, stone or brick, rapidly and easily. Everyone who uses a lawn mower has work for one of these edgers. Works best if used after a good rain or watering.

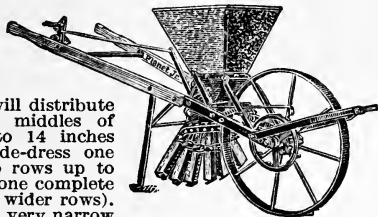
Price, each.....\$1.60

Planet Jr. Star Pulverizer

A wonderful tool for the small garden, for flower beds, hardy borders, and cultivating around trees or shrubbery—wherever one cannot conveniently use a wheel hoe. And it is faster and more thorough than an ordinary hand hoe.

Price \$3.00

No. 220 Fertilizer Distributor



The No. 220 will distribute fertilizer in the middles of three rows 12 to 14 inches apart; it will side-dress one side each of two rows up to 36 inches apart (one complete row; and corn in wider rows). You can use it in very narrow rows—as close as 9 inches. You can use it in 42 to 48 inch rows by closing off the flow in three spouts and distributing through the other three—either on the right or left hand side.

The simplicity, efficiency and long wearing qualities of the No. 220 will appeal to everyone. No chains, gears, or canvas belts to break, rust, tear, or stick. Price, \$27.00.

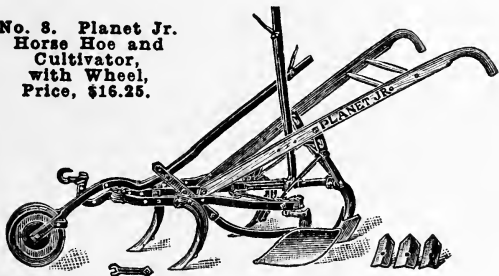
No. 235 Fertilizer Distributor

This distributor is designed primarily for golf course greens, lawns, parks, cemeteries, etc., where it is desirous to spread evenly an accurate amount of high powered fertilizer or top dressing, insecticide, etc. It puts the fertilizer on in even bands up to 36 inches in width. It will handle any form of dry commercial fertilizer and top-dressings.

Price.....\$45.00

The Planet Jr. One-Horse Tools

No. 8. Planet Jr.
Horse Hoe and
Cultivator,
with Wheel,
Price, \$16.25.



It does more kinds of work better, quicker and easier than any other cultivator. Indispensable on the up-to-date farm.

No. 7. Planet Jr. Horse Hoe and Cultivator. Same as No. 8, without the depth regulator.
With wheel.....\$15.75

No. 9. Planet Jr. Horse Hoe and Cultivator. This tool has a plain wheel instead of the lever wheel....\$14.25

No. 9D. Without wheel..... 12.25

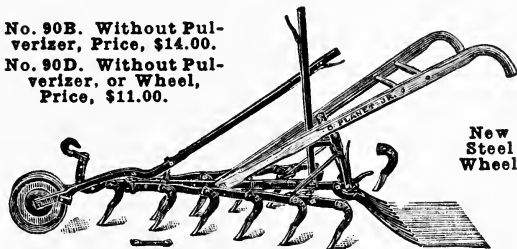
No. 4. Planet Jr. Plain Cultivator is equipped with four 3 x 8 in. cultivator steels and one 4 x 8 in. cultivator steel. Has extra high frame, round throated, hollow steel standards with patent beveled steel teeth, and patent expanders, which make an extra stiff tool, yet allow of quick adjustment for width, and one side may be closed while the other is left open.
Price with Wheel.....\$10.50

Planet Jr. 12-Tooth Harrow, Cultivator and Pulverizer is invaluable in strawberry, truck patches and the market garden. Its twelve chisel-shaped teeth and pulverizer leave the ground in finest condition without throwing dirt on plants.

No. 90. Planet Jr. 12-Tooth Harrow, Cultivator and Pulverizer. Price, complete, \$17.00.

No. 90B. Without Pulverizer, Price, \$14.00.

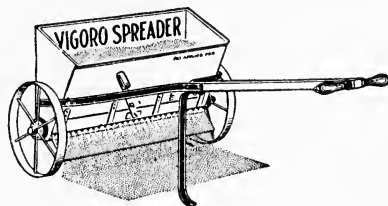
No. 90D. Without Pulverizer, or Wheel, Price, \$11.00.



New
Steel
Wheel

No. 91. Planet Jr. 12-Tooth Harrow.
With Wheel.....\$13.00

Vigoro Spreader



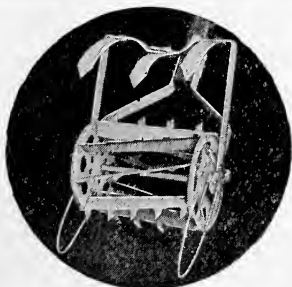
This handy implement comes in three sizes—one for every need.

The Vigoro Spreader will apply Vigoro evenly and quickly. It is an excellent distributor of grass seed, and can be used for other purposes such as spreading of sand, lime or salt. Let us demonstrate one for you.

14 inch.....\$8.00 24 inch..\$12.50 36 inch..\$20.50

RO-HO GARDENER

MULCHER-WEEDER-ROTARY HOE-CULTIVATOR



No. 8 RO-HO Gardener. Weeds and mulches a strip 8 1/2 inches wide. Rotary Hoe drum is 7 3/4 inches wide. Complete with three cultivator shovels, scuffle knife and two leaf guards. Price.....\$9.00
The size preferred by women and children for small family gardens and flowers.

No. 10 RO-HO Gardener. Weeds and mulches a strip 10 1/2 inches wide. Rotary Hoe drum is 9 3/4 inches wide. Complete with three cultivator shovels, scuffle knife and two leaf guards. Price.....\$10.00
The most useful size for the average family garden.

No. 12 RO-HO Gardener. The lower knife called a Scuffle Knife cuts 12 1/2 inches wide. Rotary drum 11 3/4 inches wide. Complete with three shovels, scuffle knife and two leaf guards. Price.....\$11.00
Best adapted where rows are 15 inches or more apart. This size is used by many truck growers.

No. 14 RO-HO Gardener. Weeds and mulches a strip 14 1/2 inches wide. Rotary Hoe drum is 13 3/4 inches wide. Complete with four cultivator shovels, scuffle knife and two leaf guards. Price.....\$12.00
This size made special for vine crops or row crops having wide "middles". The extra width makes it possible to get over a lot of ground in a short time.

Old



Trusty

DOG FOODS

"Old Trusty" All Terrier Food

A granulated food of even balance, carefully mixed, not medicated or sweetened.

An ideal food for all breeds, particularly Terriers and active dogs. May be fed dry or moistened with milk or soup. A can of Old Trusty Climax (a beef product) added makes a perfect food.

Per lb., **15c**; 25 lbs., **\$2.50**; 50 lbs., **\$4.65**; 100 lbs., **\$9.25**.

"Old Trusty" Dog Cakes

(Whole or Broken)

A nice, well balanced biscuit for all breeds. Fed dry they are not only a wonderful food but a great help to keeping the teeth in good condition. Dog Cakes may also be moistened and mixed with Old Trusty Climax, vegetables, etc.

Per lb., **15c**; 25 lbs., **\$2.50**; 50 lbs., **\$4.50**; 100 lbs., **\$8.75**.

"Old Trusty" Puppy Cakes

A tender biscuit, just the thing to be given dry to puppies of all ages. Puppies are contented when they gnaw at these biscuits. A contented puppy is a growing, healthy puppy.

Per lb., **15c**; 25 lbs., **\$2.50**; 50 lbs., **\$4.65**; 100 lbs., **\$9.25**.

"Old Trusty" Puppy Meal

A fine granulated food, not a pasty meal. Highly nutritious, with all the elements essential to the growth of healthy puppies.

Per lb., **15c**; 25 lbs., **\$2.50**; 50 lbs., **\$4.65**; 100 lbs., **\$9.25**.

"Old Trusty" Tit-Bits

A granulated food of the very highest order. An ideal food for bitches in whelp. Toy dogs thrive on this well balanced food.

Tit-Bits makes a wonderful change in diet for all breeds, also dogs off their feed. Fed dry, mixed with Old Trusty Climax, etc.

Always remember your dog looks for a change in his food.

Per lb., **15c**; 25 lbs., **\$2.75**; 50 lbs., **\$5.25**; 100 lbs., **\$10.25**.

"Old Trusty" Top Notch

A coarse granulated food for large breeds such as Great Danes, Russian Wolfhounds, St. Bernards, etc. A favorite among Hound Kennels.

Mixed with Old Trusty Climax, vegetables, etc., what can be more appetizing.

Per lb., **15c**; 25 lbs., **\$2.50**; 50 lbs., **\$4.65**; 100 lbs., **\$9.25**.

"Old Trusty" Field Dog

A large biscuit suitable for Field Dogs and all large breeds. Fed dry.

Per lb., **15c**; 25 lbs., **\$2.25**; 50 lbs., **\$4.50**; 100 lbs., **\$8.25**.

"Old Trusty" Climax

A beef product enjoying a good reputation among many of the leading kennels and dog lovers throughout the country. Mix with any of Old Trusty foods. Add 3 parts of water and boil to make soup.

Per can, **20c**; 3 cans, **50c**; per case of 36-1 lb. cans, **\$4.00**.

"Old Trusty" Se-Food

Tuna and mackerel, from which Old Trusty Se-Food is made are very high in fat and the Iodine content is higher than that of the flesh of land animals. Cod, haddock and many other fish are known as lean fish and, therefore, do not contain sufficient of what we call essential fats. Packed absolutely fresh, a wonderful addition to Old Trusty's famous line of foods for His Majesty, The Dog.

Per can, **20c**; 3 cans, **50c**; per case of 48-1 lb. cans, **\$7.20**.

"Old Trusty" All Terrier Food

Per bag of 5 lbs., **75c** each; per case of 10, 5 lb. bags, **\$6.00**.
Per pkg. of 2 lbs., **35c** each; per case of 24, 2 lb. pkgs., **\$7.00**.

"Old Trusty" Dog Cakes

Per pkg. of 2 lbs. 12 oz., **35c** each; per case of 24, 2 lb. 12 oz. pkgs., **\$7.00**.

"Old Trusty" Puppy Cakes

Per pkg. of 1 lb., 14 oz., **35c** each; per case of 24, 1 lb. 14 oz. pkgs., **\$7.00**.

"Old Trusty" Squares

A biscuit (one inch square) better than whole wheat because they contain more mineral salts and vitamins so good for the dog's health. Should be fed to all breeds once or twice a week.

Per pkg. of 2 lbs., **35c** each; per case of 24, 2 lb. pkgs., **\$7.00**.

"Old Trusty" Tit-Bits

Per bag of 5 lbs., **75c** each; per case of 10, 5 lb. bags, **\$7.00**.
Per pkg. of 2 lbs., **35c** each; per case of 24, 2 lb. pkgs., **\$7.00**.

"Old Trusty" Vitamin Bone Biscuit

Very rich in important elements known as Vitamins. Superior to whole wheat because they contain more mineral salts.

Vitamin Bone Biscuits may be fed dry or moistened with milk or soup, made from Old Trusty Climax.

An ideal biscuit for puppies and shy feeders.

Per pkg. of 28 oz., **40c** each; per case of 24, 28 oz. pkgs., **\$7.00**.

"Old Trusty" Vi-Ti

A vitamin tablet (not a medicine), and contains no animal matter. Vi-Ti produces bone and muscle and keeps the body in pink of condition, thereby warding off disease.

Large bottle, **\$1.00**.

DOG FOODS—Continued

Dog and Puppy Foods

Require no preparation, no trouble, no cooking, and are adapted for all breeds of dogs.

SPRATT'S PATENT DOG CAKES. Per lb., 15c; 10 lbs., \$1.35; 25 lbs., \$3.25; 100 lbs., \$12.50.

SPRATT'S PATENT PUPPY CAKES. 1 lb., 15c; 10 lbs., \$1.35; 25 lbs., \$3.25; 100 lbs., \$12.50.

SPRATT'S OVALS. For all breeds. Per lb., 15c; 10 lbs., \$1.35; 25 lbs., \$3.25; 100 lbs., \$12.50.

SPRATT'S FIBO. An appetizing food for shy and dainty feeders. Per lb., 15c; 10 lbs., \$1.45; per bag of 100 lbs., \$14.00.

THORO BREAD DOG CAKES. 2 lbs., 25c; 10 lbs., \$1.20; 25 lbs., \$2.75; 50 lbs., \$5.25; 100 lbs., \$9.00.

THORO BREAD KIBBLES. Per lb., 15c; 7 lbs., \$1.00; 25 lbs., \$3.50; 50 lbs., \$5.50; 100 lbs., \$9.50.

KAL-FOS. A Bone Builder and General Tonic for Animals. 1 lb., 75c.

SPRATT'S FLEA POWDER. Per can, 30c. (By mail, 35c.)

KUR-MAIGE. A reliable dressing for Dogs, Cats and Foxes. Kills Lice and Fleas. No odor and non-poisonous when used as directed. 3 oz., 75c each. Kennel size, 16 oz., \$2.00 each.

PULVEX. A thoroughly effective Flea and Lice Powder has been perfected which actually kills all the Fleas and keeps them off for sometime. 2 oz. pkg., 50c.

"Old Trusty" Dog Supplies

HARNESSES. All sizes. 75c and up.

COLLARS. All sizes. 50c and up.

LEADS. Russett and colors. \$1.00 and up.

CHAINS. 65c and up.

COMBS. Stripping and regular. 50c and up.

BRUSHES. All kinds. 50c and up.

"Old Trusty" Y-Scratch Dog Soap

This soap contains Green Olive Oil and is very valuable as a Flea Soap.

25c per bar.

Dog Remedies

We also carry a complete line of Remedies for all dog diseases.

OLD TRUSTY VERMIFUGE, JR., 60c per bottle.

OLD TRUSTY VERMIFUGE, SR., 60c per bottle.

OLD TRUSTY DIARRHEA TABLETS, 60c per bottle.

OLD TRUSTY COUGH MIXTURE, 60c per bottle.

OLD TRUSTY FIT TABLETS, 60c per bottle.

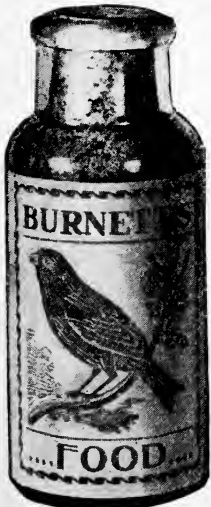
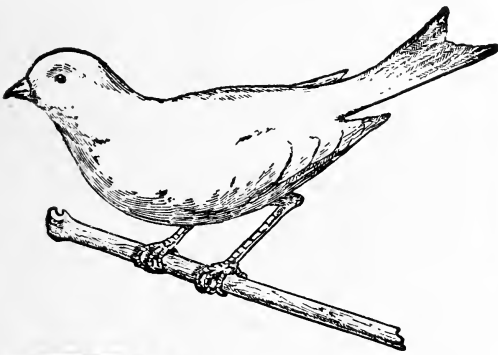
OLD TRUSTY MANGE LOTION, 60c per bottle.

OLD TRUSTY EAR CANKER DROPS, 60c per bottle.

OLD TRUSTY FLEA POWDER, 30c per can.

BIRD AND FISH FOODS AND SUPPLIES

It is very important that you make the proper selection of foods for your birds; pure, fresh, clean food is necessary at all times. Our bird seeds are of the highest quality, fresh and recleaned. Your pets will thrive if you get your supplies in this line from us.



Burnett's Bird Food. Will give immediate relief from the effects of moulting; eradicates all impurities from the blood, and restores to the songster, a strong and clear voice. Per bottle, 25c. (By mail, 30c.)

Lightning Regulator A Condition Food

An excellent natural food for keeping birds bright and active. It contains seed that birds in their natural haunts relish. Lightning Regulator is an ideal condition food for birds that are ailing. It is especially recommended during the moulting and breeding seasons. Feed an egg-food-cupful daily.

If you are feeding our Unexcelled Bird Food daily it may be advisable to feed Lightning only two or three times a week.

Lightning is packed in a wax-sealed bottle to preserve the quality. Per Bottle, 25c.

Ideal Song Restorer

The Balanced Food

Canaries will sing if they are in good health. In treating loss of song, the Canary's general condition should be the first thing to rectify. Burnett's Ideal Song Restorer acts on the bowels and digestive organs, the two most easily affected systems in animal life. Feed a teaspoonful of Ideal Song Restorer daily until bird is singing again. It is advisable to grate up the yolk of a fresh hard boiled egg and mix it with the food. Bottle, 25c.

Bird Salve

This is an excellent remedy for sore feet on all cage birds. Pkg., 15c.

Bird Balm

An easily applied treatment for bald spots and sores on all cage birds. Apply treatment to bald spots and sores daily until a remedy is effected. Pkg., 15c.

Bird Pep. Keeps Canary birds in prime condition and prevents loss of song. Easily attached to cage. Pkg., 15c; 2 for 25c.

Bird Teeth. A health grit and charcoal mixture. This food does the work of teeth more thoroughly than Gravel, and in addition has an important food value. It also acts as a tonic and will prevent constipation. Scatter over Gravel in the cage. Pkg., 15c.

Hartz Mountain Canary Cubes. A conditioner and tonic consisting of the best ingredients. Easily attached to cage. Pkg., 15c; 2 for 25c.

Burnett's Louse Powder. An effective remedy to be dusted on all kinds of birds. Per can, 25c.

Burnett's Tonic for Birds. Small, 15c; Large, 35c.

Burnett's Bird Wash. 25c.

Canary Seed. Recleaned and of splendid quality. Per lb., 15c. (By mail, 20c.)

Canary Seed Mixed. A mixture of the finest quality and in proper proportions. Per lb., 15c.

Chenoweth's Canary Food. The Birds' Balanced Ration. Keeps them in good health, song and plumage. Can, 25c.

Cuttle Fish Bone. Good for digestion and general health. Each, 5c; 20c per ¼ lb.; 60c per lb.

BIRD AND FISH SUPPLIES—Continued

Bird Sundries

Burnett's Powder Guns. Filled with Lice Powder. 25c each.

Bird Nesting. Per pkg., 10c.

Bird Baths. Made of opal glass. Each, 15c.

Canary Bird Nests. A wire basket well made. Each, 15c.

Drinking Cups. Made of opal glass. Each, 15c.; 2 for 25c

Egg Food and Tonic Cups. Each, 10c.

McCullough's Silver Washed Bird Gravel. 36 oz. pkg., 15c.

Seed Cups. Made of opal glass. Each, 15c. 2 for 25c.

Hemp Seed. Birds are very fond of this seed; it is rich and should be fed with discretion. Per lb., 15c. 2 lbs. for 25c.

Lettuce Seed. A slight sprinkle of this is much relished by canaries. Per lb., 20c.

Maw Seed. Calculated to improve the song of canaries. etc. ¼ lb., 10c; 1 lb., 25c.

Millet Seed. Nutritious and appetizing. Per lb., 10c.; 5 lbs., 40c.

Sunflower Seed. We are large handlers of this important food for parrots. We turn out only a very choice article. Per lb., 15c. 2 lbs. for 25c.

Rape Seed. Will keep birds in excellent condition; feed with canary seed. Per lb., 15c.

Thistle Seed. Fed with other foods, keeps birds in condition. 30c per lb.

Prices fluctuate considerably throughout the year. The prices now quoted are those ruling as we go to press, and may be higher or lower as the season advances. Postage must be added if wanted by mail. See Postal Rates, 2nd page of cover.

Parrot Tonic. Package, 15c.

Pollynut Mixture. Package, 25c.

Spratt's Canary Mixture. Composed of egg, flake and fruit. 25c per pkg.

Spratt's Cage and Nesting Food. Contains Cod Liver Oil. 15c per pkg.

Gold Fish and Foods

Japanese Gold Fish. 5c to 25c each.

Snails, for Aquariums. 10c each; 3 for 25c.

Aquarium Cement. 20c per pkg.

Aquarium Moss. 15c per bunch.

McCullough's Natural Fish Food. Especially put up for fish in aquariums and globes, and should be fed regularly. We can supply it in wafer or in natural form. Per box, 10c.

Ant Eggs. Per pkg., 15c.

Goldfish Bowls. An extensive assortment of styles and sizes. 50c to \$10.00 each.

Goldfish Bowl and Aquarium Ornaments. Attractive designs. 15c to \$1.25 each.

Sea Shells. Per lb., 20c.

Pearl Chips. Per lb., 10c; 2 lbs., 15c.

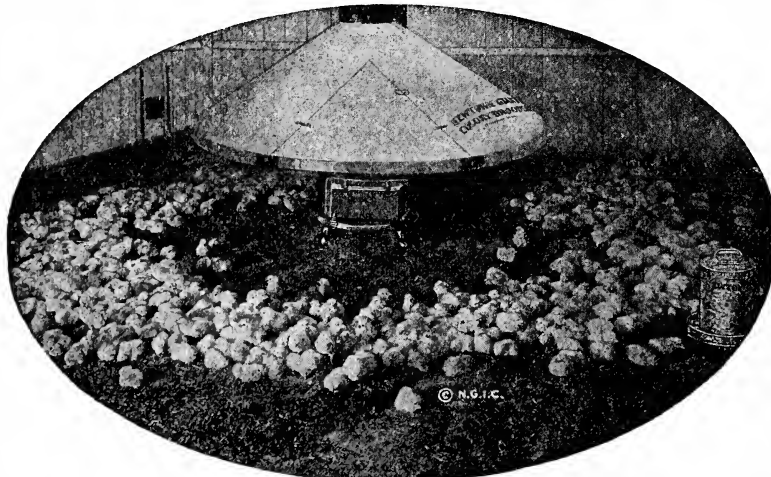
Colored Chips. Beautifully colored, many shades. Per lb., 10c.

Dip Nets. For handling gold fish when changing water in globes or aquariums. Each, 25c.

POULTRY APPLIANCES AND SUPPLIES

NEWTOWN GIANT COLONY BROODERS

"NEWTOWN" Colony Brooders were the first coal burning, self-feeding, self-regulating colony brooders made. They have proven satisfactory in every State and abroad. Made in two sizes to meet general requirements. The size of the Heater determines the fitness of the brooder for the building. A Brooder with a small heater cannot successfully supply the required heat for a large number of Chicks. "Newtown" Colony Brooders very quickly more than pay for themselves. The magazine holds sufficient fuel to last from 24 to 36 hours. This is very necessary because a brooder must hold fire all the time, night and day, in all kinds of weather. All "Newtown" Colony Brooder Heaters are made with plenty of room for ashes, so that the grates and drafts will not become clogged. The firebowl is specially designed and ventilated. The bottom is serrated so that a layer of ashes three inches thick cannot check or smother the fire.



© N.G.C.

Newtown Colony Brooder Mothering the Chicks

Buckeye Incubators

We offer these incubators as the best Hot Water Incubators on the market. These incubators are built in several sizes to meet all requirements both in size and price. Send for Descriptive Catalog.

No. 65.	75 Eggs.....	\$18.50
No. 66.	143 Eggs, with Automatic Egg Turners....	39.50
No. 67.	286 Eggs, with Automatic Egg Turners....	57.75
No. 68.	416 Eggs, with Automatic Egg Turners....	76.50
No. 69.	576 Eggs, with Automatic Egg Turners....	97.50

Buckeye "Rite-Heat" Colony Brooders

No. 103.	Capacity 500 Chicks.....	\$29.50
No. 104.	Capacity 1250 Chicks.....	33.00

Buckeye Blue Flame Colony Brooders

(Equipped With Giant Brooders)

No. 27B.	Capacity 200 Chicks.....	\$14.50
No. 80B.	Capacity 350 Chicks.....	15.50
No. 81B.	Capacity 500 Chicks.....	16.50

Buckeye Coal Burning Brooders

No. 117.	Capacity 350 Chicks.....	\$15.00
No. 118.	Capacity 500 Chicks.....	17.50
No. 119.	Capacity 1000 Chicks.....	22.50
No. 120.	Capacity 1200 Chicks.....	26.50
Buckeye Incubator Thermometer.....		1.00
Wire Holder for Thermometer.....		.15

POULTRY SUPPLIES—Continued

Royal Brooder Stoves

Will burn hard or soft coal or coke; have double draft control and require 5-inch pipe. Automatic regulation controlled by check draft on top of stove and direct draft below grate governed by two wafer thermostats; standard rocker type grates much larger in diameter and about twice as thick as grates put on the average brooder stove.

Larger coal capacities and thicker fire pots make the Royal Stoves popular with users over a period of years. New style canopy which has the front quarter of it hinged with a heavy cast-iron hinge as part of the cast ring in the center of the canopy, and a heavy bar across the front of it to support it, all wire bound, is quite an improvement. In addition to the check and lower draft dampers Royal Stoves are equipped with a half throw over cast-iron damper in the pipe collar which can be either used or not used as the consumer elects with Royal Brooders. This is a special advantage where it is necessary to switch from hard to soft coal or vice-versa on account of fuel shortage.

All Royal Brooder Stoves are absolutely guaranteed to be satisfactory as to material and workmanship and are sold on money back guarantee.

No. 6—1000 Capacity.....\$26.00
No. 7—1500 Capacity.....\$30.00

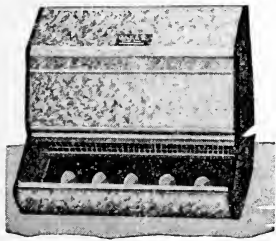
Moe's Dry Mash Hopper

A trial will convince you that it is a Hopper of the greatest merit.

Manufactured of heavy galvanized iron in four sizes.

No. 35—8½ in. wide, each...\$1.50
No. 36—12 in. wide, each....1.95
No. 37—18 in. wide, each....2.40
No. 37—24 in. wide, each....2.75

Improved Handy Hopper



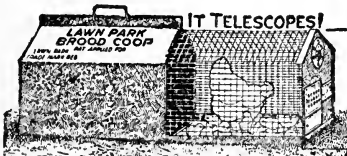
The Improved Handy Hopper is made of galvanized iron throughout. All parts are spot welded together. It is provided with hinged lid over both hopper and trough, making it rat and mouse proof, as well as dirt proof.

It is provided with a swinging front, adjustable to suit any kind of dry mash and which eliminates any possibility of clogging.

Hopper is 15 inches in height, 4½ inches in width and made in four lengths.

No. 1—12 inches in length, each.....\$1.75
No. 2—18 inches in length, each.....2.25
No. 3—24 inches in length, each.....2.75
No. 4—36 inches in length, each.....3.90

Lawn Park Coop

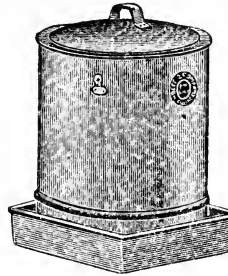


For successful chicken raising it is necessary to protect the young brood from rats, cats and other pests. The Lawn Park is the most successful coop on the market. Size, closed, 18x24 inches; with park extended, 18x48 inches. Height, 24 inches. Price.....\$4.50

Aluminum Feeding Trough

Excellent for feeding Buttermilk, as the aluminum is not affected by the acids of sour milk and similar feeds. The same design as shown above, with sliding top. Easy to clean and will never rust.

No. 69. Length 10 inches, each.....50c
No. 70. Length 20 inches, each.....90c



Moe's Improved Top Fill Fountains

Provides pure, fresh water at all times. The double wall construction retards freezing and keeps water cool in summer. Fills from the top, easily cleaned, and feeds automatically.

No. 1. Capacity 1 gallon, each.....\$1.75

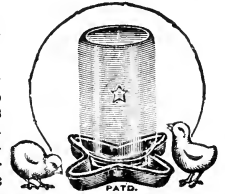
No. 2. Capacity 2 gallons, each.....\$2.50

No. 4. Capacity 4 gallons, each.....\$3.25

Moe's Star Fountain and Feeder

Made of a single piece of heavy metal. No solder, no seams, no loose parts. Suitable for feed as well as water. Little chicks can not drown. Fits any Mason jar in 1 Pint, 1 Quart, and 2 Quart sizes.

No. 32. (Glass jar not included). 10c



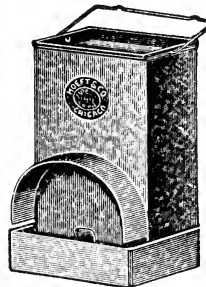
Drop Bottom Fountain

Drop Bottom, easy to fill and to clean. Has wire handle and may be hung on the wall out of the litter and dirt.

2-qt. capacity, each.....\$0.95

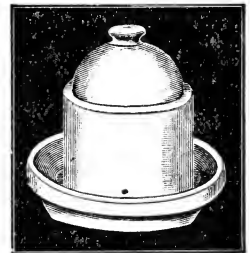
1-gal. capacity, each.....1.20

2-gal. capacity, each.....1.50



Sanitary Stoneware Fountain

The top is removable, allowing the fount to be thoroughly cleaned inside. The proper thing to use where medicine is given in the drinking water. 1-qt., 40c; 2-qt., 50c; 4-qt., 60c.



Moe's Single Feeding Trough

For chicks and growing stock. Accurately stamped with dies. No rough edges, and can be hung on the wall. Sliding top.

No. 55. Length 12 inches, each.....30c

No. 56. Length 18 inches, each.....40c

No. 57. Length 24 inches, each.....50c

Moe's Double Feeding Trough



Double trough, with sliding top, easily filled and cleaned.

Accurately stamped with dies. No rough edges.

No. 58. Length 12 inches, each.....35c

No. 59. Length 18 inches, each.....50c

No. 60. Length 24 inches, each.....60c

"Improved" Drop Bottom Fountain

The hinged bottom enables fountain to be thoroughly cleaned, while flat back keeps it firm against the wall. Drinking space two-thirds distance around can.

No. E-23. 1 gal., \$1.25 each. No. E-24. 2 gals., \$1.65 each.

No. E-25. 4 gallons.....\$2.25 each.

Day Old Baby Chicks

Below are prices of our **STRONG VIGOROUS PURE-BRED BABY CHICKS** from flocks that have been culled closely for egg laying, size, type and color; blood tested for Bacillary White Diarrhea and every possible precaution taken to insure healthy chicks. All chicks hatched in modern sectional mammoth incubators operated in well ventilated basement so as to produce those large fluffy chicks that grow and thrive.

We quote the following prices at present:

BARRED, BUFF AND WHITE PLY-MOUTH ROCKS, SINGLE COMB AND ROSE COMB RHODE ISLAND REDS

25 Chicks of any of the above varieties, \$5.00; 50 for \$9.50; 100 for \$18.00.

SINGLE COMB WHITE LEGHORNS

25 for \$5.00; 50 for \$8.50; 100 for \$16.00.

MIXED VARIETIES (All Heavies)

25 for \$5.00; 50 for \$9.00; 100 for \$17.00.

We guarantee 100 per cent live delivery, sent via Express or Parcel Post, charges prepaid. If shipment is desired within two weeks from date, enclose remittance with order for full amount, otherwise enclose 25 per cent of total amount, balance to be sent ten days before shipment. Satisfaction guaranteed.

Prices quoted are subject to change without notice.

Moe's Sanitary Feeding Trough

Can be used for feed, wet mash or water.

No. 21. 12 in. long....25c No. 22. 18 in. long....45c
No. 23. 24 in. long....60c

Moe's Grit and Shell Boxes

No. 9. Capacity about 1/4 bushel.....\$0.85
No. 90. 4 compartments.....1.10
No. 45. 2 compartments......40

Nest Eggs

Lice Expelling. Each, 10c; 3 for 25c; per dozen, 75c.
Porcelain. 3 for 15c; per dozen, 40c.
Lime. 3 for 15c; per dozen, 40c.

Egg Boxes

Paper Carton. 1 dozen size, per dozen, 20c; per 100, \$1.50.
Continental Safety Carton. 1 dozen size, per dozen, 30c; per 100, \$2.25.

Leg Bands, Spiralets (Celluloid)

For American, Asiatic and Mediterranean Breeds. 10 colors—black, white, dark blue, pink, light blue, red, garnet, green, yellow, purple. Per dozen, 15c; 25 for 30c; 50 for 50c; 100 for 75c.
Pigeon and Baby Chick Sizes. (Celluloid.) Per dozen, 15c; 25 for 30c; 50 for 50c; 100 for 75c.

Cod Liver Oil

NOPCO BRAND—Double Strength

For Poultry and Animal Feeding. Treated for Potency of Vitamin Content.

1 qt. can, each....\$1.00 1 gal. can, each.....\$2.75

Carbola

A Disinfectant Germ-Killing White Paint.

5 lb. pkg., 75c; 10 lb. pkg., \$1.25; 50 lb. pkg., \$5.25.

Moe's Round Baby Chick Feeder

No. 11. Small, each, 10c. No. 12. Large, each, 20c.

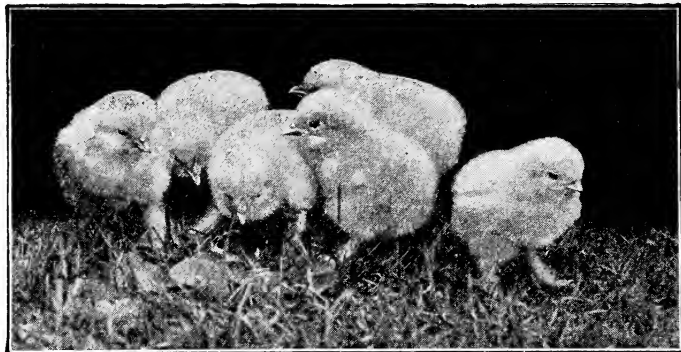
Moe's Eclipse Feeding Trough

No. 27. Length 10 inches, each.....20c
No. 28. Length 20 inches, each.....30c

Heinz Vem

A concentrated vitamin charger for Poultry and Livestock, also Dogs, Foxes and Rabbits. Charged with Super Concentrated Cod Liver Oil which supplies the growth promoting vitamin A and the Rickets preventing vitamin D.

5 lb. package, each.....\$2.50



O. K. Poultry Litter

A DEODORIZER, ABSORBENT, DISINFECTANT, ECONOMICAL AND LABOR SAVING

O. K. POULTRY LITTER is a great Labor Saver and does away with most of the unpleasant work of caring for poultry. Repels vermin and is so light and springy that heavy birds do not injure themselves when alighting on it, thereby preventing bumble foot and lameness. Keeps the birds clean as it prevents the droppings from sticking to them. It is very economical as it outlasts any other Litter two or three times. Prevents dampness and keeps the coops pure and sweet—there will be no unpleasant odors where it is used. Saves the cost of disinfectants. When through using it in the poultry houses, is worth very nearly its cost as a fertilizer. It retains (until used), all the fertilizing properties contained in the droppings and also loosens the soil. It takes an intense heat to even make O. K. Litter smoulder and it will never blaze. Makes use of dropping board unnecessary. One bale will cover about 80 square feet, 3 inches deep.

Per bale, \$4.00; 5 to 9 bales, \$3.75 per bale; 10 bales or over, \$3.50 per bale.

"O. K. P. L." keeps the birds clean—it prevents the droppings from sticking to them.

"O. K. P. L." prevents excessive moisture—controls consequent troubles from cold wet floors.

"O. K. P. L." is a deodorizer—there will be no unpleasant odors where it is used.

"O. K. P. L." moistened down in hot weather and in warm climates reduces the temperature in the house as much as 10 to 12 degrees. The fowls are more comfortable—mortality is decreased and egg production is maintained.

"O. K. P. L." prevents fire. It takes an intense heat to even make "O. K. P. L." Litter smoulder and it will never blaze.

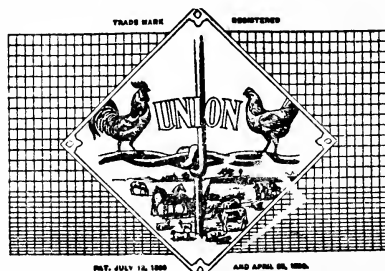
"O. K. P. L." makes use of dropping board unnecessary.

"O. K. P. L." is worth its cost and more as a Humus Manure when removed from the poultry house. Practical Poultrymen sell it to gardeners, flower and plant growers.

Union Lock Poultry Fencing

As all of the cables are the same length, and run the whole length of the fabric, every part can be stretched perfectly. Because of its strength and construction, this

fence requires no top or bottom rail and no more posts than the ordinary woven stock fence, or about one-half the number needed in ordinary poultry netting. Union Fence is especially adapted for use where a light, attractive and neat appearing fence is required.



24-in., bale of 10 rods, \$3.60 36-in., bale of 10 rods, \$4.35

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McCullough's "PROFIT-SHARING BACK-YARD" Collection \$2 Post Paid

Contains 30 full sized packets of choicest varieties of Vegetable Seeds.

MCCULLOUGH'S "PROFIT-SHARING BACK-YARD" COLLECTION OF GARDEN SEEDS CONTAINS: 3 varieties of String Beans, 1 Lima Bean—bush, 2 Beet—early and late, 1 Swiss Chard, 2 Cabbage—early and late, 1 Carrot, 2 Sugar Corn—early and late, 1 Cucumber, 1 Kale, 2 Lettuce, 1 Muskmelon, 2 Onion—white and yellow, 2 Peas—early and late, 1 Parsnip, 3 Radish, 1 Spinach, 2 Squash—summer and winter, 1 Tomato, 1 Turnip.

30 PACKETS FOR TWO DOLLARS, POSTPAID

McCullough's EASY-TO-GROW FLOWER SEED Collection \$2 Post Paid

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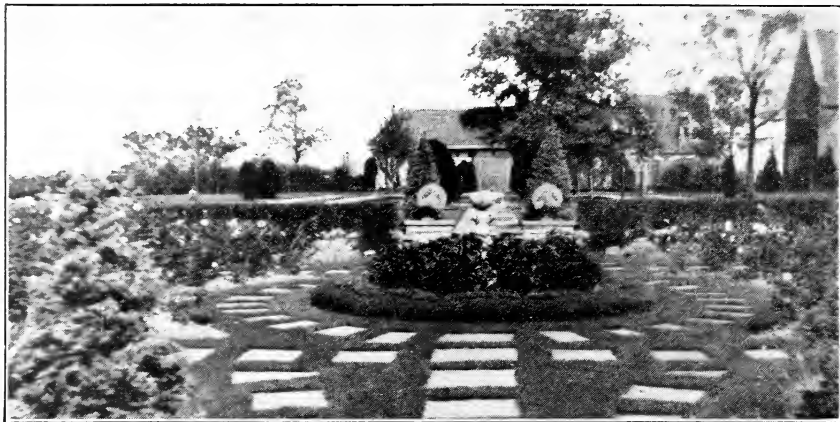
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